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DIESEL RAILWAY TRACTION SUPPLEMENT

The July issue of THE RAILWAY GAZETTE Supplement, illustrating and describing developments in Diesel Railway Traction, is now ready, price 1s.

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HISTORY OF THE BRITISH RAILWAYS DURING THE WAR 1939-45

by R. BELL, C.B.E.

with a foreword by Sir William Wood,
President, London Midland & Scottish Railway

THE RAILWAY GAZETTE
33, TOTHILL STREET, WESTMINSTER, S.W.1

Home Railway Interim Dividends

LATER this month the boards of the four main-line railway companies will meet, to decide their interim dividend policies in respect of the first six months of this year. The directors of the Southern Railway Company and the London Midland & Scottish Railway Company are expected to make their announcements on July 25, and those of the Great Western Railway Company and the London & North Eastern Railway Company on the next day. The London Passenger Transport Board will hold its meeting on July 24. In other circumstances the substantial fall in traffic which the railways are experiencing, would lead to apprehension as to the payments to be announced, but under the wartime agreement with the Government for the control of the railways the rental is fixed, and it is not expected that any change will be made in the rates of dividend declared for the junior stocks for the first half of this year. A year ago G.W.R. consolidated ordinary stock received 2 per cent, which was made up to 5 per cent, at the end of the year. The L.M.S.R. paid in full on its preference stocks, but deferred a decision on the ordinary dividend until the end of the year, when it paid 4 per cent. The L.N.E.R. paid full rates down to and including the 5 per cent. redeemable preference stock (1955) and 1 per cent. on the 4 per cent, second preference stock, which, at the end of the year, received a final dividend of 2½ per cent., making 3½ per cent. for the full twelve months. The Southern Railway Company distributed 2½ per cent. on its preferred ordinary stock, which received its full rate for the year, and in March last 2 per cent. was paid on the deferred ordinary stock.

Extension of G.W.R. Goods Zoning Scheme

The G.W.R. zonal scheme for the collection, delivery, and transport of small consignments of goods in the Birmingham area has now been in successful operation for six months, and is being extended to the Cardiff, Pontypridd, Port Talbot, Worcester, and Redruth areas. The zoning system, which was described in our note on the scheme in the Birmingham area in our January 25 issue, aims at giving one-day transit time for small consignments not only between large centres, but also between outlying towns and villages served by the company. In the new areas mentioned above, all incoming and outgoing "smalls" traffic will be concentrated at one main depot and from two to five sub-depots. Traffic is conveyed between the depots and customers' premises by the company's road motors. The Cardiff zone, which came into operation on July 1, covers 200 square miles and has sub-depots at Barry, Llantrisant, and Caerphilly. Similar service will be introduced shortly in the other zones. The largest area will be covered by the Redruth zone, with sub-depots at Falmouth, Helston, Penzance, Truro, and St. Ives, serving 450 square miles.

Mr. Herbert Kelway-Bamber

The death of Mr. Herbert Kelway-Bamber, M.V.O., recorded in our June 14 issue, has removed one of the most energetic and vigorous personalities from the railway world and has deprived the Institution of Locomotive Engineers of one of its oldest and most valued members. He was a keen supporter of a number of other technical societies; but it was to that Institution that he devoted himself with characteristic enthusiasm for more than a quarter of a century. Including his presidential address in 1930, he presented no less than seven different papers to the Institution, covering Indian and South African practice (of which he could speak with authority), steam railcars, and the important subject of waste in locomotive power. It is interesting to observe that one of these earliest papers—like his last, which he read only some two months ago—dealt with the economic transport of coal, a matter to which he had given great attention. Although originally trained as a locomotive engineer, Mr. Kelway-Bamber will always be remembered as an expert in carriage and wagon design. His notable achievement in the design and construction of the Indian royal train used by King George V led to his being awarded the M.V.O. In later years, his association with the Leeds Forge Co. Ltd., and the Sentinel Waggon Works Limited, gave him many opportunities for exercising his remarkable talents in connection with rolling stock design.

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Home Railway Traffic Decline

Home railway traffics for the four weeks ended June 16, at £27,530,000, showed a total decline of £3,435,000, and for the 24 weeks of the current year the aggregate of £155,852,000 is lower by £17,549,000 than for the similar period of 1945. The next traffics to be issued will affect the higher charges which came into force on July 1. Details of the changes in receipts in comparison with the similar period of 1939 are:

FOUR WEEKS ENDED JUNE 16, 1946					
	1946 £000	1945 £000	Decr. £000	Per cent.	1939 £000
Passengers ...	16,090	17,209	1,119	6.9	8,719
Merchandise ...	7,737	9,823	2,086	26.6	4,404
Coal and coke ...	3,703	3,933	230	6.2	2,354
Total ...	27,530	30,965	3,435	12.4	15,477

AGGREGATE FOR THE TWENTY-FOUR WEEKS OF THE YEAR					
	1946 £000	1945 £000	Decr. £000	Per cent.	1939 £000
Passengers ...	85,717	89,208	3,491	4.0	43,233
Merchandise ...	47,992	61,923	13,931	29.0	24,976
Coal and coke ...	22,143	22,270	127	0.5	16,275
Total ...	155,852	173,401	17,549	11.2	84,484

The aggregate decline in traffics for the 24 weeks of the year is equal to a rate of some £38,000,000 for a full year. It compares with £36,700,000 a year for the previous four-weekly return. If such a rate of decline were to be continued, the net revenue of the pool would be reduced to about half the fixed rental of £43,500,000, without allowing for higher costs.

Overseas Railway Traffics

Labour troubles are again reflected in the traffics of South American railways. Receipt in this country of the complete traffics of the Antofagasta (Chili) & Bolivia Railway for the week ended June 2 was delayed by the railway strike in Bolivia. They have now been published, and show a decrease of £4,420. The strike was declared illegal by the Bolivian Government on June 4 and terminated on June 9, traffics for the week ending on the latter date being £22,250 below the preceding year. In the fortnight ending June 23 there was a decline of £8,660, partly attributable to one day's holiday this year on both sections of the line. Buenos Ayres & Pacific traffics gained ps. 272,000 in the week ended June 15, but were ps. 88,000 down in the ensuing period. Buenos Ayres Great Southern and Buenos Ayres Western receipts recovered in the week ended June 22, but the B.A.G.S. is ps. 69,000 down on the fortnight, although the Buenos Ayres Western shows a net gain of ps. 238,000. Results are tabulated below:—

	No. of week	Weekly traffics	Inc. or dec.	Aggregate traffics	Inc. or dec.
Buenos Ayres & Pacific*	51	1,898	- 88	115,189	+ 4,128
Buenos Ayres Great Southern*	51	3,484	+ 533	179,514	+ 9,959
Buenos Ayres Western*	51	1,382	+ 273	61,428	+ 3,649
Central Argentine*	51	3,167	+ 488	160,422	+ 13,369

Canadian Pacific	24	1,054,000	-216,600	26,382,800	-2,714,500
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* Traffic returns in thousands of pesos

The Canadian National aggregate to the end of May is £3,931,600 below the preceding year.

Below the Belt

An unpleasant example of the methods sometimes adopted to malign the railways was provided in the House of Commons on Monday, when Mr. Alfred Barnes, replying to the question on the need for alterations to Derby Station, had said that modernisation plans had been prepared. Lt.-Colonel Sir Thomas Moore, Conservative M.P. for Ayr Burghs, intervened to ask if it was not a fact that the only way in which one could discriminate between the lavatories and the restaurants in any station in this country was by the smell. To which the Minister rejoined that if this was so, it had been during the years that the railways had been under private enterprise. One need not comment on the cheapness of the wit in either the question or the answer, but it is worth pointing out that since September, 1939, the railways have been under Government control, and that the shortage of staff, materials, and general difficulties from which they suffer, are not matters for which private enterprise is responsible. The railways have made great efforts, particularly since the end of hostilities, to improve their facilities. They have re-introduced restaurant cars—which were suspended by Mini-

sterial order—provided improved services and at a number of stations have installed modern railbars, or other means of serving refreshments. As will be seen by our report of Parliamentary Questions on another page, the Minister stated that at Derby two new railbars have been redecorated during the last few weeks, one refreshment room is being redecorated, and the other is to be dealt with shortly.

Railway Traffic Operation Statistics

In the May issue of the *Monthly Digest of Statistics* issued by the Central Statistical Office, details are given of loaded train-miles, loaded wagon-miles, estimated ton-miles, and the average length of haul run by main-line railways. The source of these details is the Ministry of Transport, and from them it is possible to make a very broad estimate of traffic movements. The figures are given in four-weekly periods, and the latest are those for the period to March 23. For that four weeks the total coaching loaded train-miles averaged 4.07 millions, which was approximately the same as for each of the three preceding periods. Since the four weeks ended June 1, 1945, when the relative statistic was 3.89 millions, loaded coaching train-miles have been over the 4 million mark. Before that they were running at approximately 3.75 millions, back to the autumn of 1944. The average figure for 1945 was 3.94 millions and for 1944 3.67 millions, whereas for 1938, the last full pre-war year, it was 5.28 millions. Loaded freight train-miles averaged 2.37 millions in the four-weekly period to March 23 last, compared with 2.34 and 2.20 millions for the two previous periods. The peak was 2.70 millions reached in the four weeks to July 8, 1944. For the whole of 1945 the average was 2.37 millions, compared with 2.57 millions for 1944, and with 2.29 millions for 1938.

Australian Commonwealth Railways

Earnings of the Australian Commonwealth Railways for the year ended June 30, 1945, were £2,424,018, as compared with £3,459,205 in 1943-44. Working expenses were £2,112,800, a decrease of £307,764, and the surplus on working was £311,218, as against £1,038,641 in the preceding year. The decline in traffic was caused by the changing war situation, and was particularly noticeable on the North Australia Railway. Regular civilian passenger traffic on the Trans-Australian Railway was limited to one train weekly in each direction for most of the period under review. The regular weekly mixed train, with dining car, on the Central Australia Railway between Quorn and Alice Springs was maintained throughout the year. Military trains between Terowie and Alice Springs were worked by locomotives of the South Australian Government Railways under a continuance of the existing arrangement. Traffic on the North Australia Railway was almost entirely on behalf of the armed forces. All traffic for the Services was carried for the cost of operation and without profit to the department. The Australian Capital Territory Railway (4 miles 75 ch.) showed a deficit of £727; increased goods traffic partly offset a decline in passenger business and contributed to an improvement over the previous year.

Railway Financial and Operating Statistics: Ireland

At a recent meeting of the Statistical & Social Inquiry Society of Ireland, a paper presented by Professor B. F. Shields, M.A., and dealt with briefly elsewhere in this issue, analysed the financial and operating statistics of the Great Southern Railways Company and the Great Northern Railway Company, Ireland, from 1938 to 1944. In making a contrast between these companies, it must be recognised that they are different in capital structure, in the amount and maintenance of their plant, rolling stock, etc., in their route mileage, and in the density of the population and extent of the territory for which they provide transport facilities. The beginning of this period, and especially the end of 1938, found both companies in a condition of financial embarrassment, whereas at the end of 1944 their net revenues were such that they could pay dividends on their guaranteed, preference, and ordinary stocks, after making large transfers to reserves. An examination of their net revenues for 1944 shows, moreover, that road transport in the case of the G.S.R. was more profitable than the railway,

due mainly to immense difficulties of railway operation, while the railway plays the most important part on the G.N.R.

A New Hexagon Turret Lathe

The first Herbert hexagon turret lathe was introduced in 1897, and now, with its jubilee within measurable distance, this type has assumed a leading position amongst bar machines. The elements of the original machine have remained virtually unaltered to the present day. They comprise a bed, a headstock, and a turret slide with automatic feed; the whole design is based on the use of box tools for turning, large reductions in diameter being made in one cut. A burnished finish is produced which often eliminates the need for subsequent grinding. The chief directions in which improvements have been carried out in the present Herbert No. 2 hexagon turret lathe are the drive (a built-in motor now being employed), the change-speed gears and associated components, the cutting fluid supply, and the development of better materials of construction. The machine is fully described elsewhere in this issue. Controls, too, are simplified; and now, for instance, a switch lever on the headstock is sufficient to effect the change from turning speeds to screwing speeds. There can be little doubt that the re-introduction of this famous line of hexagon turret lathes, after the suspension of manufacture during the war, will be welcomed by many engineers who are responsible for the production of work from the bar.

A Moment of Forgetfulness

The circumstances of the collision at Mottingham, Southern Railway, on March 19, 1946, when an electric train ran into a waiting light engine, resulting in the death of the motorman, are given in our summary of Colonel A. C. Trench's report in this issue. The excuses brought forward in this case have done duty over and over again. We do not think it is sufficiently impressed on engine-men during their training how easy it is for a signalman to forget them for a moment, and in that moment to undo all the security afforded by the signalling. It is interesting to note that the Dartford loop, on which Mottingham is, was one of the very few portions of the old S.E.C.R. suburban system which was never fitted with the Sykes lock-and-block, the Walker's apparatus remaining in service there till this day. The signal giving admission to a section is often electrically locked with the Walker block, but otherwise it is operated as a plain block telegraph. It is fundamentally a two-position instrument, as were all the original one-wire block systems, but after Walker's time a third indication for the section in rear was provided in the form of an automatic friction-disc plate, which showed "train on line" on turning the commutator back in answer to "train entering section," this plate being later pushed out of view by hand when giving "train out of section."

U.S.A. Diesel-Electric Power in 1945

By the close of 1945 the total number of diesel-electric locomotive units at work on United States railways, including the switching and terminal companies in large cities, had risen to 4,387, with a total rating of 4,603,930 b.h.p. The total number of shunting units—2,375—still leads the way, of course, but it is significant of the rapidly increasing popularity of diesel propulsion for long-distance freight and passenger work, that the combined output of the 1,068 freight and 503 passenger units, 2,347,260 b.h.p., is now well in excess of the total 1,920,910 b.h.p. of the shunters. The most popular varieties in "road" freight service are the units of 1,350 or 1,500 b.h.p., usually marshalled into quadruplets of 5,400 b.h.p. with multiple-unit control (or in some cases into triplets of 4,050 or 4,500 b.h.p.); in the passenger realm dependence is placed almost exclusively on 2,000-b.h.p. units, used most frequently as 4,000-b.h.p. twins, or on the heaviest duties as triplets of 6,000 b.h.p. The advantage of this multiple-unit method is that it is possible to proportion the locomotive power to the task to be performed, without variation in the size of the engine crew, and to withdraw a unit when necessary, either for routine repairs or as the result of a breakdown, without putting the entire locomotive out of commission.

Distribution of Industry

UNDER the Distribution of Industry Act which received the Royal Assent on June 15, 1945, the Board of Trade became the Department responsible for the distribution and location of industry throughout Great Britain. This Act, it may be recalled, was passed to implement the policy of the Coalition Government outlined in the White Paper (Cmd. 6,527) issued in May, 1944, the main object of which was to secure a balanced industrial development in areas which had been unduly dependent on industries which proved to be very vulnerable to unemployment. Under the Act, the North Eastern Area, the West Cumberland Area, the South Wales & Monmouthshire Area, and the Scottish Area were scheduled as Development Areas, and, under their permissive powers, the Board of Trade has since scheduled the Wrexham and South Lancashire Areas.

As a first step, the Board of Trade endeavoured to promote the prosperity of the basic industries on which these areas primarily depend for employment by assisting them to secure overseas markets. It then acquired large areas of suitable land for industrial development, and many sites have been accepted by large industrial firms manufacturing a wide range of goods, the underlying intention being to secure a diversified industrial settlement and thus avoid dependence on a single industry or group of industries in any given area. The Board of Trade is also empowered under the Act, subject to Treasury consent, to make loans to trading or industrial companies where it is considered they will further the provision or expansion of industrial premises in these areas. Grants may also be made to such undertakings towards the cost of improving such services as power, lighting, heating, housing, transport, etc.

On the other hand, the Act provides that no contract may be let for the erection of a building with a floor space exceeding 10,000 sq. ft. which forms part of a new industrial unit, without the Board's consent. This restriction does not apply to extensions or replacements of new buildings, but even these projects are subject to the approval of the Ministry of Works and other Ministries, so as to ensure a balanced use of the available labour and materials. In this connection it is of interest that since VJ-Day last year, 2,831 licences have been granted for new factories and extensions to existing factories, the total floor space sanctioned being 14 million sq. ft. in development areas, and 16 million sq. ft. in other areas. The new Act has afforded industrialists official assistance and valuable contracts which would not otherwise have been available, and its administration has been marked by appreciation of the requirements of trade and industry, although disappointment has been expressed in some quarters at the refusal or deferment of licences to build.

Railway Stockholders and Nationalisation of Transport

IN November last the Government announced its intention to introduce, during the life of the present Parliament, measures designed to bring transport services, essential to the economic well-being of the nation, under public ownership and control. At the Labour Party Conference held at Bournemouth early in June, Mr. Emanuel Shinwell, Minister of Fuel & Power, reiterated the intention of the Government to nationalise the transport industry, and stated that: "If the railways are to pay their way, they cannot be divorced from road transport. That it will be embodied in legislation and become an actual fact is beyond doubt. That will come very soon."

In view of the probability that the Government will introduce into Parliament in the early stages of next session a Bill for the nationalisation of the railways and long-distance road haulage, the boards of the four main-line railway companies feel it essential to obtain immediately the views of their stockholders on the matter. The four railway Chairmen have, therefore, despatched a letter to every railway stockholder in similar terms (the wording of which is reproduced on page 27), explaining their boards' conviction that the advantages of maintaining the British railways under their present ownership and management far outweigh any likely to be obtained

under any form of State ownership. They enclosed extracts from their speeches at the annual meetings earlier this year, and asked for a clear mandate in support of their views.

A postcard was attached on which the stockholders are asked to indicate whether or not they favour the boards' taking all possible steps to oppose any nationalisation proposals affecting the railways, and a letter was enclosed from the British Railway Stockholders Union or the London & North Eastern Railway Stockholders Association as the case may be. Within a comparatively short time, therefore, the boards should know to what extent their views are supported by their stockholders. According to reports in the daily press, there has been a large response from stockholders.

It is interesting to recall the similarity which exists between the present position and that which existed after the 1914-1918 war. Then it was agreed that Government control should last two years after the end of the war, and, as working expenses had increased greatly under Government management, it was recognised that substantial increases in rates and charges were inevitable. Late in 1918 the Government announced its intention of making transport a leading feature of its reconstruction policy, and shortly afterwards introduced into Parliament "The Ways & Communications Bill," the title of which was subsequently changed to "The Ministry of Transport Bill." As this Bill contained clauses enabling the Minister of Transport to acquire railway undertakings on terms, failing agreement, to be determined by arbitration, these provisions were strongly opposed by the railway boards and in the result the Government agreed to withdraw the purchase provisions.

The boards then took up the question of securing adequate compensation for loss of revenue or depreciation of the value of their undertakings consequent upon the Government dealings with them, either through the agency of the Board of Trade or the proposed Ministry of Transport. In the result, clauses satisfactory to the companies, providing means for ascertaining and settling any compensation payable under these heads, were included in the Bill, which finally emerged as the Ministry of Transport Act, 1919. In December of that year the railway boards circularised their stockholders outlining the trend of their negotiations with the Government and explaining the nature of the important modifications they had secured.

Shortly afterwards, when the grouping of the railways was proposed, the boards circularised their stockholders (twice in 1920 and again in 1921) to keep them informed of the modifications they had secured in the Government Bill which subsequently became the Railways Act, 1921. It is to be hoped that the railway boards will be as successful in securing as satisfactory an alteration in the proposed Railway Nationalisation Bill as they were in 1919-1920. Our own feeling is that, having regard to the time which will be required to organise a successful publicity campaign in political and other circumstances which are vastly different from those existing when the "Square Deal" campaign was organised in 1939, it would have been advantageous if this referendum had been taken much earlier so that the publicity campaign could have been correlated with that of other threatened transport industries.

* * *

Longmoor Revisited

BY courtesy of the War Office, representatives of the technical press recently had the interesting privilege of visiting the Transportation Training Centre of the Corps of Royal Engineers at Longmoor Camp in Hampshire. After making the acquaintance of the Commandant, Brigadier C. A. Langley, C.B.E., M.C., and his staff, the Commandant gave a very comprehensive and interesting address in which he dealt as fully as time permitted with the history of the Centre, the training carried out in the past, and what it was hoped to carry out in the future. He also dealt with the organisation of the transportation service in the past, the present, and the future as far as finality in planning permitted. He gave a short résumé of the work done by transportation during the war so recently ended. In view of the completeness of the Commandant's address it is printed in full on page 11.

One of the first things that impressed one during the visit was the extraordinary keenness of everyone with whom one came in contact. There must be some fascination in trans-

portation which grips those who are trained in this sort of work. This is no doubt encouraged by the fact that in peacetime all trained personnel spend alternate periods of duty on transportation and general Corps duties, that is, they come back to the transportation "home" at frequent intervals. In wartime, of course, they spend all their time on transportation work. One is much impressed by the spirit of *camaraderie* which exists amongst the "old hands."

Notwithstanding the enormous expansion of the Transportation Service which was demanded at the beginning of the war in 1939, an almost complete embargo was placed on the enlistment of appropriate civilian tradesmen into the service. This meant that all the necessary tradesmen for new units had to be trained *ab initio* at the two training centres. How well this was done is shown by the work which the units carried out. It is a matter for regret that the very hard work involved has not received more publicity and acknowledgment.

In the tour around the workshops one was impressed by the fact that most of the trainees were employed on productive work. There is hardly anything which encourages a learner so much as the knowledge that the work he is engaged on has a practical value and that the result will be incorporated in some "job." This obviates the dangerous dullness of a set job which is designed for the sole purpose of testing skill in the use of tools. This "useful job" slogan has long been in force at Longmoor.

Perhaps the most interesting item of the visit was the opportunity to see some of the standard railway bridges used on active service. The models in the Bridging School received great admiration as an effective teaching method. The *pièce de résistance*, however, was the Everall sectional truss bridge. Merely to see this bridge was an improvement on looking at its photograph. It would have been even better if one could have watched its erection during a really long period of its construction. The simplicity of parts sufficiently small to be easily transported, which can be used for a large number of long-span bridges of lengths varying by quite short steps with depths to suit, has to be seen to be appreciated fully. Illustrated descriptions of this bridge appeared recently in *The Railway Gazette*. It would be beneficial if all railway engineers in Great Britain could see one of these bridges erected and launched. It would be greatly to everyone's credit if the War Office could be persuaded to arrange such demonstrations.

In connection with this very extensive bridging programme, it is interesting to note that Brigadier Langley was responsible for introducing Lt.-Colonel Everall to the Transportation Directorate at the War Office in the latter part of 1936. This means that Colonel Everall had been investigating the subject of railway bridges for use in war for about two years before his official appointment as Consulting Engineer to the War Office (see *The Railway Gazette*, March 2, 1946). Brigadier Langley's action might almost be referred to as one of benevolent prophecy, which has been thoroughly justified.

The end of the war and the consequent reduction of the Army strength to the modified conditions of peace have raised problems which have caused much thought at Longmoor. The first problem is the manning and upkeep of the Transportation Service which will have a considerably greater establishment than pre-war. As far as the Regular part of the service is concerned, practically the whole of the personnel will have to be trained in the same way as was done during the war. The process of demobilisation will mean that most of the older, better-trained, and more experienced men will return to civil life. This will entail the loss of most of the present instructional staff, officers and other ranks alike. They must be replaced by others who are willing to continue in the service, and who, after careful selection, must be made fit for their new jobs before the training machine can function properly again.

The other problem is the recoupment of the Supplementary Reserve. During the war there was no intake into this from the same source and in the same way as before the war. One must expect that nearly the whole of the original personnel will disappear as part of demobilisation. How is it to be replaced? One can but hope that many of the younger men

who entered the army during the war will retain sufficient liking for part-time army service, provided that they can do so in units that do the same sort of work as they do in their civil employment. The encouragement of such a spirit can best be furthered by intensive propaganda on the part of the War Office amongst the civil railways, docks services, and ancillary organisations.

It is to be hoped that this visit will be but the forerunner of more of a similar kind. There should be continual co-ordination and collaboration between the Army Transportation Service and its civilian counterparts. This could be encouraged to a great degree by the technical press. Many years ago it was almost a standard practice for all young officers joining at Longmoor to join the Institute of Transport. Unfortunately, this habit appears to have fallen into abeyance. It is to be hoped that Longmoor and the Institute will co-operate to revive this excellent and beneficial practice.

State Ownership and Control of Transport

(From a Correspondent)

IT is common knowledge that railway stockholders have been asked by the Chairmen of the four main-line companies to say whether they are in favour of all possible steps being taken to oppose the nationalisation of the railways. The circular letter issued by the Chairmen stated that the boards of the companies were "convinced that the advantages of maintaining the British railways under their present ownership and management far outweigh any likely to be obtained under any form of State ownership." In support of this declaration of faith, the stockholders were supplied with copies of the remarks made by the Chairmen at the last ordinary general meetings of the companies. Nothing was said about the terms which the present proprietors might expect to secure in the event of the State taking the lines over. Neither was any

indication given of the policy which the railway companies would propose to pursue if they were set free from Government control.

In the absence of guidance on these all-important points, it is difficult to see how any great value can attach to the result of the poll. One suspects that the average stockholder will be influenced in casting his vote either by political convictions or by preconceived ideas of the financial effect of a change-over from private to public ownership. He would have been in a better position to come to a reasoned decision if the Chairmen had outlined constructive proposals for reorganising the main-line undertakings, as an alternative to State ownership and control. Unless the companies are ready with a comprehensive scheme of their own, they cannot hope to oppose the Government's plans effectively.

It is obvious that there cannot be a return to the state of things that prevailed before the war. In 1933 the railways were in sore straits and were clamouring for relief. Now after eight years of social and economic upheaval, many new factors have come into play modifying, to the detriment of the railways, the conditions which existed between the two wars. Town and country planning will alter transport requirements. The redistribution of industry and the enticing of new factories to the development areas will tend to upset the normal growth of traffic. So will the nationalisation of basic industries like coal mining and steel manufacture. Road, air, and sea competition will soon be aggressive to a degree not experienced before the war. In particular, road competition will be intensified as each stage of the Ministry of Transport's scheme of road development is completed. Changes in port administration, too, are contemplated which may interfere with railway dock properties, already adversely affected by the catastrophic decline in coal shipments. It is regrettable that we have no idea how the railway companies themselves would propose to recast their constitution and working arrangements to suit the strange after-war environment in which they will have to function.

Publications Received

Die Geheimnisse der Eisenbahn (Behind the Scenes on the Railway). Edited by Ernst Gut. Berne: Verlag für Wissenschaft, Technik und Industrie A.G. 390 pages. 9½ in. × 6½ in. Illustrated. Copies obtainable from H. K. Lewis & Co. Ltd., 136, Gower Street, London, W.C.1. Price 16s.—During the last few years special efforts have been made in Switzerland, even to the point of holding classes in the schools, to imbue the Swiss public with a greater sense of the national value and importance of its railways, and to create a better understanding of the part they are called on to play in the life of the country. These efforts have met with a good response and this new book should find a ready welcome among a wide circle. It has been put together by nine writers, each a specialist on his subject, under the general editorship of Herr Ernst Gut. With the aid of a well-chosen selection of over 200 illustrations, for the most part well reproduced, it covers concisely every aspect of the subject, giving a certain amount of historical detail as an introduction and concluding with references to the work done by the leading Swiss engineering firms. It is difficult to single out any part for special mention, as it is all interesting, but the sections dealing with civil engineering, splendid examples of which abound on the Swiss lines with the mountain lines and electrification, are particularly appealing. The steam locomotive, as playing an ever diminishing part in the scene, receives less attention. In the development of electric traction and the perfecting of the single-phase system, Swiss ability and perseverance have played a decisive part. The

present work admirably reflects that spirit of independence and initiative which is so evident in Switzerland generally.

The Virginia & Truckee Commemorative Calendar.—The San Francisco branch of the Railroadians of America, 1,500, Chanslor Avenue, Richmond, California, has prepared a striking wall calendar with the object of commemorating one of the many interesting, but abandoned, railways of the U.S.A. The Virginia & Truckee Railroad was chosen as the first subject for what may become a series, because of its wide appeal and romantic past in connection with the Nevada silver mining boom. The top part of the calendar is a two-colour sketch of a V. & T. train in its prime. Below this is a map of the railway, flanked (on the left) with an historical summary, and (on the right) a statement of motive power and rolling stock. Below is a tear-off calendar.

History of the British Railways During the War, 1939-45. By R. Bell, C.B.E. London, 1946: *The Railway Gazette*, 33, Tothill Street, Westminster, S.W.1. 9 in. × 6 in. 291 pp. Price 25s.—In a foreword to this book, Sir William V. Wood, President of the L.M.S.R., describes it as having been written "to enable railwaymen, and those interested in railways, throughout the world to see what was accomplished, and how it was accomplished in those critical years for the nation and for world freedom." Various publications have already appeared dealing with the more spectacular aspects of railway work under fire, but Mr. Bell's purpose is to tell the whole story, complete with its administrative and statistical background, from the first emergency

plans made after the Munich crisis of 1938, up to the end of the war. To treat a period so charged with incident and change on a strictly chronological basis would have made it hard to trace the consecutive history of individual subjects, and the book is therefore divided into chapters of which each one is concerned with a particular item, such as passenger train services, operating results, additional facilities for wartime traffic, and so on. This arrangement, aided by a full index and numerous appendices, makes the book valuable for reference as well as for reading the narrative of a memorable period in British railway history. The book will be dealt with at length in an editorial article in our issue next week.

"New Zealand Engineering." Wellington, New Zealand: Technical Publications Limited, Southern Cross Building, 22-24, Brandon Street. 11 in. × 8½ in. Price 1s. 3d. a copy.—We have received a copy of Vol. 1, No. 1, of this new technical journal, dated April, 1946. It is planned to cover civil, electrical, mechanical, and structural engineering, and welding. By arrangement with the two institutions concerned, it is being supplied without charge to all members of the New Zealand Institution of Engineers and the New Zealand Institute of Welding, and it contains a 16-page section devoted to the activities and proceedings of the former body and 8 to the latter, in addition to general articles and editorials. The subscription is 15s. per annum in New Zealand, and 18s. to other parts of the world. The first issue is well-produced, and gives promise of adding a useful feature to the engineering literature of the Dominion.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

East Indian Railway Appointment

General Manager's Office,
East Indian Railway,
East Indian Railway House,
Calcutta. June 20

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—My attention has been drawn to the following, which appeared in *The Railway Gazette* of May 17, 1946, at page 545, under the heading: Railway News Section: Personal:—

"Khan Bahadur G. Faruque has been appointed to officiate as General Manager of the East Indian Railway."

Mr. N. C. Ghosh, O.B.E., M.Inst.T., is still the General Manager of the East Indian Railway, and Khan Bahadur G. Faruque, the present Chief Operating Superintendent, will take over from Mr. Ghosh when he retires, in December, 1946.

Yours faithfully,

P. C. DE
Secretary to General Manager

Slip Coaches in Scotland

12, St. John's Park,
London, S.E.3. June 22

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—There were some references in *The Scotsman* last April, commenting on the coming restoration of slip carriages on the G.W.R., to "slips" in Scotland at the end of the nineteenth century, and mention was made of a North British slip off an up train at Stow. I cannot now trace this, and should be grateful if some North British enthusiast among your readers could supply the details.

You published in your issue of January 10, 1936, an article on "Slip Coach Services," soon after the mishap with one of the slips on the 6.20 p.m. from Marylebone, which records the North British as operating three slips in 1875 and two in 1890. I can trace two in the winter of 1875—off the 10.15 a.m. from Edinburgh to Carlisle at Gorebridge, and off the 9.15 a.m. Glasgow to Edinburgh at Polmont—and one in 1890, when the 1.12 p.m. Carlisle to Edinburgh contained a note against Longtown: "A carriage detached at 1.28; the train does not stop," so that possibly the Stow slip (which would make the numbers correct) was not publicly advertised?

Yours faithfully,

R. E. CHARLEWOOD

Naming Locomotives after the C.M.E.

21, Briarfield Road,
Tyseley, Warwickshire. June 25

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—It is pleasing to observe that the 2,000th locomotive out-shopped from the Doncaster Works has been named *Edward Thompson* in honour of her designer. Such a distinguished and active locomotive engineer as Mr. Thompson is indeed very worthy of this recognition, and no doubt many would like to see the great names of Henry A. Ivatt and John G. Robinson honoured in a similar way (together with Sir Nigel Gresley and Edward Thompson). Perhaps no finer names could be bestowed upon a locomotive, and certainly no finer locomotive could be more worthy of bearing them than Mr. Thompson's handsome new Pacifics.

It may be interesting to recall just how the practice of naming locomotives after locomotive superintendents and chief mechanical engineers first originated. As far as I can trace, the very first locomotive to bear the name of a locomotive engineer was an early G.W.R. broad-gauge 2-4-0 type engine named *Gooch* (and this engine was not numbered). The continued practice appears, however, really to have originated at Crewe when Francis Webb named an engine of the "Newton" class *John Ramsbottom* in honour of his former chief. From then on, all the L.N.W.R. locomotive superintendents were each honoured by having their names bestowed upon one of the company's locomotives, and the practice became a fine Crewe tradition. The last L.N.W.R. chief to be so honoured was Mr. C. J. Bowen Cooke, whose name was bestowed upon one of his own "Claughton" class engines in 1923. Since then, however, the L.M.S.R. appears to have discontinued the practice. It would be pleasing to see these fine names revived, and other such distinguished names added, including David Jones, Richard M. Deeley, Matthew Kirtley,

Peter Drummond, George Hughes, and so on, which could be borne by the "5X" passenger engines now running without names, whilst the great name of Sir William Stanier would look exceedingly well if carried by one of the L.M.S.R. streamline Pacifics.

The Great Western Railway has honoured the great Sir Daniel Gooch by bestowing the name on one of the "Castle" class engines, and it is rather a pity that the other great men of Swindon, Joseph Armstrong, William Dean, George Jackson Churchward, and Charles B. Collett, have not as yet been so honoured. It would be pleasing to see these names carried on the new "Castle" class engines now under construction at Swindon. It is interesting to recall that the late Mr. E. L. Ahrons once remarked that "to those who love the steam locomotive at heart, the locomotive engineers are their heroes, and to them their names are as great and distinguished as any in the annals of British history."

Yours faithfully,

A. RICHARDS

Rehabilitation of French Railways

58, Rue de Courcelles,
Paris, (8e). June 16

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—The summer service of the French National Railways is a further and considerable improvement on the preceding timings, which were summarised in *The Railway Gazette* for October 26, 1945, page 414.

The high standard of punctuality attained in 1939 has now been regained. In March, 1946, the percentage of express trains arriving 15 min. late or over at terminal points was 7 per cent., whereas in 1939 the corresponding figure was 5.5 per cent. The present services are nearly equivalent to the pre-war services as regards the frequency of trains on the more important lines. The overall speeds are lower, however, because the maximum speed is limited to 100 km. (62.1 m.) p.h. for railcars, except in the following cases:—

(a) 110 km. (68.3 m.) p.h. for trains on all downhill stretches on the lines of the Northern Region.

(b) 120 km. (74.6 m.) p.h. for the following trains: (1) The "Fleche d'Or" between Paris and Boulogne; (2) trains 7 and 8, Paris-Bordeaux; and (3) trains 35 and 36, Paris-Lyons.

The following tables speak for themselves. It is necessary only to recall that in September, 1944, practically all the important bridges, tunnels, junctions, locomotive depots, workshops, and stores were destroyed, and 80 per cent. of the locomotives and two-thirds of the rolling stock were out of service.

TABLE A—NON-STOP RUNS FROM PARIS

	Distance (miles)	No. of services daily	Fastest train Time (Hr. min.)	Speed (m.p.h.)	Type (see notes)
Paris-Poitiers ...	206.3	18	3-33	58.1	E
Paris-Arras ...	119.4	16	2-10(1)	55.2	D
Paris-Nancy ...	219.1	16	4-00	54.8	B
Paris-Deauville ...	136.3	4	2-31	54.2	B
Feignies-Paris ...	143.2	14	2-47(2)	51.4	S
Dijon-Paris ...	195.3	28	3-52(3)	50.5	S
Paris-Vierzon ...	124.0	30	2-33	48.8	E
Paris-Le Mans ...	131.1	24	2-44	47.9	E
Paris-Calais ...	184.4	10	3-55(4)	47.1	S
Paris-Limoges ...	248.3	14	5-18(5)	46.9	E

TABLE B—LONG-DISTANCE RUNS

	Distance (miles)	No. of services daily	Fastest train Time (Hr. min.)	Speed (m.p.h.)	Type (see notes)
Paris-Bordeaux	359.2	12	6-35	54.7	E
Paris-Strasbourg	311.4	12	6-00	52.0	B
Paris-Lyons ...	317.0	18	6-35	48.3	S
Paris-Bayonne ...	482.5	6	10-24	46.4	E
Paris-Marseilles...	535.8	10	12-10	44.0	S
Paris-Toulouse ...	442.7	8	10-15	43.2	E
Paris-Nice ...	675.0	6	16-30	40.6	S
Paris-Cerbère ...	600.9	2	15-00	40.1	E & S

NOTES

S = Steam; E = Electric; D = 3-car diesel-electric train; B = 2-car Bugatti railcar

(1) Continues to Lille, 156 miles, in 3 hr. = 52.1 m.p.h.

(2) "North Star"

(3) Includes 6-min. service stop at Laroche

(4) "Fleche d'Or," scheduled to pass Amiens, 81.2 miles, in 95 min. = 51.3 m.p.h.

(5) Includes stops at Vierzon and Chateauroux

The fastest Paris-Lyons and Paris-Bordeaux runs are not made by the same trains as the fastest Paris-Marseilles and Paris-Bayonne runs

The speed of the fastest Paris-Bordeaux train is the same as that of the "Empire State Express" of the New York Central lines between New York and Buffalo.

Yours truly,

BARON VUILLET

The Scrap Heap

SECRET PASSAGE

Thirty-five passengers who recently were trapped in a lift at Angel Station, London Transport, were released by transferring them to another lift lowered alongside. Commenting on the mishap, a London Transport official explained that all lifts are equipped with emergency doors, enabling such transfers to be made, but the doors are usually hidden by advertisements.

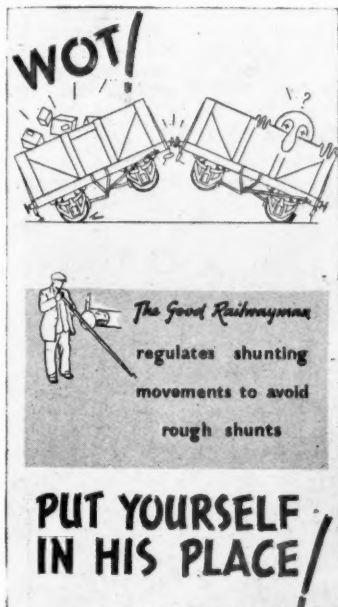
STATION ATTRACTION

Plymouth's North Road Railway Station has an unusual feature, and claims to be one of the few in the country which has such a distinction.

Many seagulls are making the place their residence or a frequent visiting place. These gulls, with their lovely appearance and distinctive calls, have added a new and pleasant note. They are also providing a break in the monotony for long-distance travellers who have to wait for trains.—From the "Western Morning News."

L.N.E.R. CLAIMS PREVENTION POSTERS

In 1944 the L.N.E.R. issued a series of posters reminding members of the staff handling traffic by passenger train of the various ways in which they could help to reduce claims for loss and damage during transit. Six new bills appealing for similar co-operation on the part of goods traffic staff have now been produced. At the head of each poster, that delightful character, "Chad," quizzically peeps at the result of some all-to-frequent mistake. Below is a simple sketch of the "Good Railwayman" correctly carrying out an appropriate duty, and a crisp statement of what he does in the circumstances. A final exhortation reads: "Put yourself in



his place." The posters, designed by the Advertising Manager in association with the Goods Managers and Superintendents, and printed in bright colours, measure 20 in. x 12½ in., a size suitable for display in warehouses, goods offices, staff rooms, and similar situations.

MANY HAPPY RETURNS

Much has been said of the large numbers of unclaimed articles left in trains, but what of the many items which find their way back to their rightful owners? During the past year at the L.N.E.R. lost property offices at Kings Cross, Liverpool Street, and Marylebone, 30 fountain pens were returned to writers of notes in trains, 1,092 attache cases were handed back to carriers of important documents, and 654 umbrellas found on racks were returned to their owners' homes. On 423 occasions the L.N.E.R. has given a hand to people who have been in danger of becoming one-glove travellers, and nearly 1,300 suitcases also have been returned to their owners.

WHY?

Why are trains which are frequently late not re-timed to be more in keeping with the actual running time?

The L.M.S.R. runs 28,000 passenger and freight trains, but excluding electric trains, daily over its system. An analysis of the running of trains over a period of 22 days shows that there is nothing constant about them. The 8.15 a.m. express from Euston to Holyhead, for instance, during the period from March 1 to 26, 1946, was on time on 12 occasions. On six other occasions it was from 4 to 15 minutes late, and on one occasion was 48 minutes late, due to a mechanical failure of a locomotive on a preceding freight train.

Over the same period another train, the 7.45 a.m. Leeds to St. Pancras, was on time on eight occasions and was not more than 15 minutes late on six occasions. Delays of 42 minutes and 32 minutes on two days were occasioned by track repairs; a delay of 36 minutes was caused by a broken rail, and fog on another occasion resulted in a delay of 49 minutes.

The facts are that an analysis of the day-to-day running of trains which is carried out by the operating experts shows that different causes for delay occur at different places on different days. Where there are recurring delays from a particular cause which can be overcome, adjustments are made, to the timetable, and hundreds of such adjustments are carried out.

Every train, passenger and goods, is scheduled to run to a plotted "path." If a train gets out of its allotted "path," it then sets up what the railwaymen call "reaction."

In other words, it affects detrimentally the running of other trains, and puts them out of their allotted "paths." Of course, we know that trains can't always keep to their allotted paths, and to minimise delays, traffic controllers are located at strategic points to take direct action. But the real problem is what basis could be used for re-timing in keeping with actual running times—obviously there isn't any.

Trains, before they are put into the timetable, are plotted on a train diagram. Every line on this diagram represents a train and the alteration of the running of one train affects many others. The train diagram is divided into 1/10-in. squares. The trains are plotted to a scale of 2½ miles to the inch vertically, and 3 in. to the hour horizontally. Therefore, each 1/10-in. square represents ¼ mile vertically and two minutes horizontally. Each sheet covers 12 hours, there being one diagram for the "a.m." period and another

for the "p.m." Trains running on main and passenger lines are drawn with continuous lines, and on slow or goods lines with different types of broken lines. The L.M.S.R. is divided into 165 sections for train diagramming purposes, the sections not, as a rule, exceeding 65 miles in length. It is generally admitted that the method of

Gossips still get ducked!



The Pilgrim Fathers used a ducking stool to punish gossips. Well, most people will still duck a gossip... duck having anything to do with him or her. So don't be a tale-bearer. The smart thing to do about gossip is forget it!

[From "Company Manners" issued by the New York Central system]

timing trains by diagrams is the most accurate and scientific method available.—From "The L.M.S. Answers Your Questions."

100 YEARS AGO

From THE RAILWAY TIMES, July 4, 1846

ADVERTISEMENTS.

REMINGTON'S LINE. LONDON AND MANCHESTER DIRECT RAILWAY.

Shares.	Numbers inclusive.
100	29,161 to 29,260
10	70,391 .. 70,400
20	101,811 .. 101,830
40	101,981 .. 102,020
10	102,071 .. 102,080
10	103,261 .. 103,270
5	107,386 .. 107,395

Holders of any of the above are requested to send in the lowest cash price for the same to Mr. THOMAS GITTINS, Share-broker, Manchester.

"FATHER" OVERTAKES

Lord Corvedale, Socialist M.P. son of Lord Baldwin, has a country cottage at Little Stoke, near Goring-on-Thames. He normally goes there by train on Friday evenings. After Reading, the Goring train takes the slow line and sundry other trains pass it on the fast line. The other day Lord Corvedale's fellow travellers noticed that the engine of an overtaking train was named Earl Baldwin. However, Lord Corvedale did not see it. He was asleep in his corner seat.—From "The Londoner's Diary" in the "Evening Standard."

HOTEL ON WHEELS

It is so long since I heard anyone speak of British railways as enthusiastically as the Empire Press delegates, that I decided to make a personal inspection of the "Silver King," the 15-coach train which is their travelling hotel during their tour of the North. Mr. R. A. Laird, the liaison officer in charge of the train, told me that it was a combined effort of the L.N.E.R., L.M.S.R., and the Pullman Company. It was the last word in luxury travel.

There were four Pullman cars—picturesquely named *Medusa*, *Ibis*, *Lydia*, and *Chloria*—with complete office equipment for conference purposes. In addition to a letter-box, public-address system, and 24-hour clock, there were facilities for long-distance telephone calls. The seven sleeping cars were capable of accommodating 70 passengers, each in a single berth with such amenities as electric fans, bedside lamps, and tables on which to rest the morning tea and newspapers.—From "The Yorkshire Post."

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

INDIA

Railway Finance Committee

The standing Finance Committee for Railways, which met on May 17 and 18 under the chairmanship of Mr. I. S. Puri, the Financial Commissioner of Railways, was informed of the latest position of gross earnings and working expenses on Indian State Railways. The total approximate ordinary working expenses, including suspense but excluding appropriation to and from the depreciation reserve fund, of budget lines up to the end of February, 1946, were Rs. 104.45 crores, or Rs. 13.57 crores more than the corresponding period of last year and 19.0 crores less than the revised budget proportion. The total approximate gross earnings of all budget lines from April 1, 1945, to March 31, 1946, amounted to Rs. 221.01 crores, or 3.65 crores more than the actuals for the previous year and Rs. 3.83 crores less than the revised budget estimate.

Surveys for New Lines

The Railway Board has sanctioned an engineering survey for a broad-gauge line from Manmad to Nardhana, a distance of about 79 miles. The survey will be known as the Manmad-Nardhana railway survey and will be carried out by the G.I.P.R. The Railway Board has also sanctioned a traffic survey by the G.I.P.R. for the diversion of the Jhansi-Cawnpore main line between Erach Road and Orai, to include Kunch, a distance of about 32 miles. The survey will be known as the Kunch diversion survey.

Armed Guards on Trains

Owing to recrudescence of Hur activities, armed patrols have been posted at points between Nawabshah and Retha Stations on the Lahore-Karachi route of the North Western Railway. Armed guards will also accompany all trains over this section. It is understood that night running will be stopped on this section if further serious trouble is foreseen.

Armed guards are being posted to all trains running on the Dacca-Mymensingh-Bhairab section of the Bengal Assam Railway owing to increasing "Goondism" on trains on this section. Until recently Goondas were confining their activities to night trains, but now they have started to board day trains as well. A favourite method is to stop the train by pulling the alarm chain and then to throw out passengers' luggage to accomplices waiting by the side of the line. On one recent occasion a train was stopped 35 times between Kauraid and Dhala Stations by pulling the alarm. Abduction of girl passengers has also been reported.

NEW SOUTH WALES

Hawkesbury River Bridge

One of the largest engineering works carried on by the department during the war was the construction of a new railway bridge over the Hawkesbury River, approximately 36 miles from Sydney. In 1937 defects appeared in the piers of the old bridge, which was opened for traffic on May 1, 1889. It was decided to construct the new bridge on the western (or upstream) side parallel to, and approximately 200 ft. from, the old bridge. This site involved a tunnel on both sides of the river. The construction of the bridge began in July, 1939, and the work con-

tinued throughout the war. When begun it was regarded as a necessary work to enable traffic between Sydney and the northern lines to be handled satisfactorily. After war broke out completion of the bridge became a matter of still greater urgency, because the speed restriction of 15 m.p.h. placed on trains over the old bridge was a great handicap to the expeditious movement of the large wartime traffic on the northern line. As it happened, the war ended before the bridge was finished. Nevertheless its continued construction in the war period has made it possible to open it for traffic early in the post-war period. This was most desirable in view of the further speed restriction of 5 m.p.h. placed on traffic over the existing bridge in September, 1945.

Dimensions of New Bridge

Unlike the old bridge, which has seven spans 416 ft. in length from centre to centre of the piers, the new bridge has eight spans, two of 445 ft. 8 in., four of 347 ft. 6 in., and two of 147 ft. The longest steel spans weigh 1,650 tons each, and the total weight of steel in the whole superstructure is 7,860 tons. The overall length of the bridge is 2,764 ft.

There are five deep piers founded in sand, ranging in depth from 178 ft. to 183 ft. 7 in. The other three piers are founded on rock, two of them on the southern bank and one on the northern. The caissons are rectangular in shape, being 51 ft. long and 29 ft. wide.

Floating Spans into Position

The spans were constructed at ground level on an excavated area on the southern bank, a little upstream from the old bridge. As each span was completed it was raised, by means of large screws driven by electric motors and gearing, to a height sufficient for it to be floated on to the bearings on the piers. Punts, on which trestles had been assembled to the required height, were then floated under the span, and

the weight was taken with the rising tide. These punts, approximately 100 ft. long and 40 ft. wide, were then towed out to the piers at high tide and the spans were allowed to settle into position on the bearings as the tide fell. Three punts were used for each of the 445 ft. spans and two for each of the smaller ones. The department designed and built the caissons, piers, and steel superstructure; the steel was supplied by local firms. [A view of the bridge during construction is reproduced on page 21. Some further particulars of the work appeared in our May 24 issue.—Ed., R.G.]

The new bridge was opened to traffic on July 1 by the Hon. W. J. McKell, M.L.A., Premier and Colonial Treasurer of New South Wales.

UNITED STATES

New Transcontinental Sleepers

Another through sleeping car service between New York and Los Angeles was introduced by the New York Central on June 1. The cars leave New York on the "Iroquois" at 11.15 a.m., and are transferred at Chicago to the "Golden State Limited" of the Rock Island and Southern Pacific systems. Los Angeles is reached at 8.45 p.m. on the third day. In the reverse direction the cars leave Los Angeles at 11.15 a.m. on the "Golden State Limited" for Chicago, whence they are taken on by the N.Y.C. "Commodore Vanderbilt" and reach New York at 8.30 a.m. on the third morning.

A Washington-San Francisco through sleeping car service was introduced by the Baltimore & Ohio, in conjunction with the Chicago & North-Western and Union Pacific, on June 2. The B. & O. had already inaugurated a Washington-Los Angeles sleeping car on March 31, as recorded in *The Railway Gazette* of May 3.

Accelerated Coast-to-Coast Services

A new Chicago-Los Angeles train with a 404-hr. schedule, introduced by the Chicago & North-Western and Union Pacific on June 2, has enabled 15 hr. to be cut from the former running time of the New York Central through sleeping

First Post-War Coach Built in the U.S.A.



Interior of first post-war coach built by the Pullman-Standard Car Manufacturing Company, part of an order for 153 vehicles now being delivered to the New York Central System

cars between New York and Los Angeles. The cars now travel between New York and Chicago on the "Commodore Vanderbilt," which train also conveys through sleepers from Los Angeles via the Southern Pacific and Rock Island route in the eastbound direction. A reduction of 14½ hr. has been made in the running time of a through sleeping car from New York to San Francisco.

Chicago-West Coast Accelerations

The "El Capitan" and "Super Chief" expresses of the Santa Fe resumed their pre-war running times of 39½ hr. between Chicago and Los Angeles on June 2, representing a cut of 2 hr. on the previous schedule. The "Chief" schedule between the same points has been cut 1 hr. 50 min. westbound and 25 min. eastbound. Cuts of 3 hr. 45 min. westbound and 30 min. eastbound between Chicago and Los Angeles have been made in the timing of the "California Limited."

Increased Freight Rates

A 6 per cent. increase in railway freight charges (except for agricultural products, livestock and products, and low-grade mine products, for which the increase amounts to 3 per cent. only), has been authorised by the Interstate Commerce Commission. The increases became effective on July 1. A further 5 per cent. increase, making 11 per cent. in all, has been authorised in official (Eastern) classification territory, but coal, lignite, and iron-ore are exempt from this additional increase.

CHILE

Increased Railway Rates

An increase of 11 per cent. in all basic rates charged by the Antofagasta (Chili) & Bolivia Railway and the Aguas Blancas Railway has been authorised by the Government of Chile. The increased rates will take effect on publication of the Decree in the official Government bulletin.

CANADA

Renewals and New Works

During the current year the Canadian Pacific Railway is spending \$36,110,454 in Eastern and Western Canada for rehabilitation of company property and new construction and rebuilding necessarily deferred during the war. The total is made up of \$20,344,324 for western lines and \$15,766,130 for eastern lines. This year the Canadian Pacific expects to lay approximately 1,100 miles of rail, 730 miles of it in the west. The total cost of improvements to track, roadbed and laying of rails will run to \$19,858,899, with \$7,586,849 earmarked for the east and \$12,272,049 for the west. In addition, more than \$3,228,000 will be required for strengthening of bridges, trestles and culverts to allow operation of heavier motive power, especially on lines in the Maritimes and in the Rocky Mountain Region.

Improvements to Buildings

While most of the appropriations have been allotted to improvement of track and ancillary properties, expenditure on new construction and special projects is estimated at more than \$9,000,000. Work on locomotive repair shop and engine sheds will total \$2,690,294 in the west and \$2,178,971 in the east, while \$1,208,255 and \$3,044,071 has been marked for stations, offices, and other buildings in the same sections of the Dominion. Another \$1,951,631 has been set aside for signals and interlocking installations, providing for 199 track-miles of automatic block signals

along eastern lines and 187 miles in the west.

Other miscellaneous works run to an overall total of \$1,849,514. Included in the total Eastern Canada appropriation is \$2,457,000 for 365 miles of rail, \$654,700 for re-ballasting, \$408,000 for sleepers and rail anchors, and \$147,000 for rail welding.

At the Glen Yards, Montreal, \$830,000 is going into improving passenger car facilities, a major item in the figure for new construction on eastern lines, which also includes modern stations at Owen Sound, Red Rock, and White River, all in Ontario. Among the new coaling plants and water stations for Eastern Canada is one at Saint John, N.B., costing \$172,000, and others in Ontario at Lambton, Carleton Place, and Chapleau, which will cost \$112,000, \$73,000 and \$80,000 respectively.

Programme for Western Canada

More than 700 track-miles of permanent way to be laid in Western Canada will run to \$4,653,483, while \$1,044,075 will be spent on sleepers and rail anchors, \$215,240 on re-ballasting, and \$141,900 on rail welding.

While track improvements make up a major share of the western lines appropriations, there will be large expenditures on shops, round-houses and the mechanical department, including construction of a modern \$500,000 direct-steaming plant at Alyth Shops, Calgary. (See *The Railway Gazette* of June 21.) The Western Canada figure for signals and interlocking plants includes the construction of a new \$300,000 signalling installation to replace the existing signalling at Rugby Junction, Winnipeg.

A further \$156,920 will be spent on coaling plants, and \$277,840 on water stations. The company's marine operations call for appropriations for extension of a ferry slip at Vancouver, and construction in a Vancouver shipyard of a \$200,000 diesel tug for barge service on Okanagan Lake in British Columbia.

NIGERIA

Locomotives from Canada

The Crown Agent for the Colonies in London has instructed the Montreal Locomotive Works Limited to proceed with construction of 14 steam locomotives for the Nigerian Railway. Delivery is planned by the end of the year. The locomotives will be used in a project to ease the acute world shortage of fats. When Nigeria explored its raw material sources, it was found that a large harvest of groundnuts, which provide fats, was expected, but existing motive power on the railway was insufficient to move all the harvest traffic. The locomotives from Canada will help to meet the transport requirements. The locomotives are similar to those manufactured by the Montreal Locomotive Works for the Newfoundland Railway. They are of the 2-8-2 type for the 3-ft. 6-in. gauge.

KENYA & UGANDA

New Cold Store at Kilindini

The present cold storage accommodation at Kilindini Harbour is very meagre, and inadequate to handle export traffic. It consists of a small plant built by the Public Works Department in 1926, which has been added to from time to time and is now of 30,317 cu. ft. capacity. It was designed to deal with small quantities of butter and fresh provisions for ships calling at Mombasa.

It is now proposed to erect a terminal cold store of a total capacity of 106,500

cu. ft., which will be able to handle up to 1,200 tons of chilled and frozen produce. This store will consist of 11 storage rooms of varying capacity, two pre-chiller and two pre-freezer rooms. Each room will be equipped with an air cooler capable of maintaining chilled or frozen conditions. In addition, the plant will be capable of freezing 16 tons of butter a day entering at a mean temperature of 60° F., and one ton of pork a day entering at a mean temperature of 30° F. The produce which will pass through the store to begin with will be pork and butter, and will be railed into No. 5 cargo shed in insulated wagons, whence it will be transferred to the cold rooms by means of two air-lock corridors.

The refrigeration plant, which will be erected and operated by the Chief Mechanical Engineer, will be housed in an engine room adjacent to the cold store. It is being supplied by J. & E. Hall Limited, of Dartford, Kent, and consists of two compressors of 7½ in. bore x 7½ in. stroke. One is a triple-cylinder compressor, and the other a twin-cylinder vertical increased high-speed ammonia compressor of the makers' design, directly coupled to a Crompton-Parkinson electric motor running at 428 r.p.m. The ammonia condensing plant is designed to allow both compressors to run together on the cold store.

FRANCE

Djibouti to Addis Ababa Railway

It is reported in Paris that the railway from Djibouti to Addis-Ababa, in Abyssinia, now under British military administration, is to be returned to the French company under an agreement signed on May 4. The transfer is to take place within three months from the date of the agreement.

Referendum on Coach Construction

The French National Railways Company (S.N.C.F.) has circulated a referendum asking the opinion of passengers on proposed improvements in details of construction and decoration of coaches for main and branch lines. Beginning on May 15, leaflets were distributed to travellers in the trains asking them to indicate their preference for numbered proposals by marking a ring round the chosen number and then handing back the marked questionnaire to a guard or putting it in a voting box. A similar referendum has also been taken among the visitors to the Paris Trade Fair.

The questions enabled travellers to state their preference for compartment or centre-corridor coaches, different methods of class indication (including distinctive colours for each class), styles of seating and decoration, and light meals service at tables or at a bar.

No Free Travel on the Metro

Despite the huge numbers of people now carried by the Paris Metro, strict economies are found essential to cope with rising maintenance costs. In 1945, the Metro transported 1,552 million passengers, or more than 4,000,000 a day, the figure sometimes exceeding 5,000,000. Although the first-class flat fare was recently raised to fr. 5, the second-class fare still remains at fr. 2, equivalent to an English penny. One economy just voted is the suppression of all free travel on the Metro and buses in the Paris area. As holders of free or reduced tickets, are generally administrative employees, the various administrations are to pay for such otherwise gratuitous travel in the future. It is estimated that the company's receipts in 1945 were reduced by fr. 100,000,000, or more than £200,000, by the use of some 15,000 privilege tickets. The police alone held 11,366 such tickets.

Financial and Operating Statistics of Railway Companies in Ireland

*Analysis of results of the Great Southern and Great Northern Railways from 1938 to 1944**

THE aggregate of the net revenue of the Great Southern Railways Company for 1938 was the lowest in the 20 years of its existence, and required, with the balance, £36,910, brought from the preceding year, a transfer of £6,101 from the compensation fund to pay the amounts due for interest on debentures, etc.

The Great Northern Railway, at the end of 1938, was in even worse condition, and was forced to transfer £25,000 from general reserve for a like purpose, leaving a debit balance of £34,000 to be carried forward. At the end of 1944 a big change had taken place in the financial position of the two companies.

The G.N.R. was able to take advantage of the unprecedented degree of prosperity in the northern part of the system, as a result of the varied classes of war work and ancillary industries, the influx of armed forces, and of its increase in engine mileage in 1944 by 33 per cent. on that of 1938.

The G.S.R., on the other hand, enjoyed a more or less monopoly position from 1942 for the carriage of passengers and goods in a part of the country in which there was an increasing intensification of tillage and turf production and large quantities of money in the hands of traders, farmers, industrialists, and the general public; but it was hampered, as a result of limited and poor fuel supplies, by a reduction of total engine mileage of 11.6 million miles in 1938 to 7.5 million, or about 36 per cent., in 1944.

One fact that is evident from the above figures, so far as the G.S.R. is concerned, is the greater relative financial importance of road transport services, and the comparative decline in the net returns from the railway. Although the net revenue for the railway showed an increase of over £100,000 between 1938 and 1944, it formed 71 per cent. of the net revenue of the company in the former year, compared with only 45 per cent. in the latter, while the percentages for road transport were 17.5 and 52 respectively. Taking the combined net income of rail and road transport for 1942-44, we find that 46 per cent. of the total net revenue of the company is the outcome of rail transport, and 49.4 per cent. of road services.

Traffic Increase

The total railway receipts for the G.S.R. in 1944 show an increase of 53 per cent. over those of 1938, the corresponding percentage increase in the case of the G.N.R. being 175 on lower initial figures. Both companies present a continuous upward movement in the total annual traffic revenue, interrupted slightly in the G.S.R. returns for 1942, due to reduced income from passenger fares. This upward movement on the G.S.R. is for the most part made up from increases in freight traffic, while in the case of the G.N.R. the increases are divided between passenger and goods trains, with larger balances in favour of the former in 1942-44.

As a result of truncated passenger services on the G.S.R. during 1942-44, the receipts from goods trains became more

and more predominant, constituting almost 70 per cent. of the total railway income in 1944, while the revenue from passenger fares assumes a more important rôle on the G.N.R., with an increase of about £1,000,000 in 1944 over 1938.

Comparing the returns for 1944 with those for 1938, on the G.S.R. there was a reduction from about 11,500,000 to some 8,750,000 passengers; the number of first class passengers had increased by over 100 per cent.; the number of third class passengers was about one-third less; and the increase in the average receipts per first and third class passengers was 6 per cent. and 43 per cent. respectively.

The position of the G.N.R. in respect to passengers was somewhat different. There was an increase of from about 8,000,000 to about 18,000,000 passengers; the number of first class passengers had increased five-fold; the increase in the number of second and third class passengers was more than 100 per cent., and there was an increase of over 20 per cent. and 37 per cent. in the average receipts from ordinary second and third class passengers.

The income from the carriage of parcels and sundry goods on the passenger trains of both systems was well maintained during the period, and disclosed an increase of about £90,000 for the G.S.R. in 1944 over 1938, and of £60,000 for the G.N.R., thus testifying to the fact that, where greater speed and better services can be afforded on passenger trains than by goods trains, the railways can retain no insignificant part of this traffic.

A distinct upward movement in revenue from goods train services of the two systems may be noted. Any comparison between the revenue from goods train traffic on the G.S.R. in 1943 and 1944 and that in previous years must take into account the fact that many of the exceptional rates were abolished as a result of an Emergency Decree in June, 1943, which allowed the company to charge higher rates.

The items showing the most remarkable increases for goods traffic in the returns for 1938-44 on the G.S.R. are merchandise, about £1,000,000, including expenses of collection and delivery, and other minerals, about £.5 million. The number of tons of merchandise carried in 1938 was 1.48 million at an average of 17s. 3½d. per ton, compared with 1.71 million tons in 1944 at an average rate of 24s. 4½d. per ton, or an increased rate of over 40 per cent., the expenses of collection and delivery excluded in each case.

The ton-mileage for merchandise in 1938 was 119,000,000, or an average rate of 2.96d. per ton-mile, compared with 136,000,000 ton-miles in 1944, or an average rate of 4.37d. per ton-mile, showing an average increase of about 48 per cent. in rates, assuming the same proportion of the many articles under the heading "merchandise" was carried in the year under comparison. In other words, the gross receipts for merchandise in 1944 showed an increase of about 70 per cent. on the 1938 figures, while the increased percentage for ton-miles was only 14.

The item in the gross receipts from goods train traffic on the G.N.R. showing the largest increase in 1944 over 1938 is merchandise, £.62 million, out of a total

increase of £.85 million. The number of tons of merchandise carried in 1938 was 0.6 million tons at an average rate of 11s. 10½d. per ton, and in 1944, 1.18 million tons at 16s. 7d. per ton, or an average increase in rates of about 40 per cent. The ton-mileage of merchandise for 1938 and 1944 was 34.56 and 67 million ton-miles respectively, an average rate per ton-mile of 2.84d. and 3.95d. for the two years, or an average increase of 39 per cent. in 1944 on the 1938 figures.

There was a large increase in expenditure on both systems in 1944 over that in 1938, the increased expenditure for the G.S.R. being slightly over £1½ million, and for the G.N.R. £1½ million. The item showing the largest increase in expenditure on the G.S.R. was locomotive running, due mainly to the heavy fuel costs, which rose from £318,000 in 1938, or 10.9 per cent. of the total railway working expenses, to almost £966,000, or 28.9 per cent. of the total in 1944. In other words, out of every £1 incurred in working expenditure in 1938, 2s. 2d. was spent on fuel, whereas in 1944 the sum was 4s. 9d.

Cost of Fuel

When consideration is given to the number of engine miles run in these two years, the cost of fuel per engine mile in 1938 was 6.38d., and in 1944, 2s. 5.65d., an increase of 362 per cent. These higher costs were dependent partly on the higher fuel prices per ton and partly on the fuel consumption per engine mile. The latter in 1938 was 42.92 lb., whereas in 1944 it was 80.06 lb., or an increase of almost 87 per cent.

During 1942-44 the locomotive fuel costs amounted to £2.8 million, and their costs per engine mile in 1942 and 1943 were about 2s. 2d. and 2s. Were it not for the reduction in engine mileage, itself a product of limited and poor fuel, the additional costs of the fuel used in 1944 for steam raising purposes would be about £.5 million for 1944 on 1938.

The locomotive fuel costs of the G.N.R. in 1938 and 1944 constituted 12 per cent. and 18.8 per cent., respectively, of the aggregate rail expenditure for these years. In this item there was an increase in expenditure of 250 per cent. for 1944 on the 1938 figures, whereas the corresponding increase for the G.S.R. was 204 per cent. This is no criterion, as costs must be related to the work done.

Fuel costs on the G.N.R. for 1938 worked out at 6d. per engine mile, about the same as that of the G.S.R., and at about 1s. 4d. in 1944, a little more than half the rate for the G.S.R. for the same year. The fuel consumption per engine mile in the latter year on the G.N.R. was 55.35 lb., or an increase of about 19 per cent. on that for 1938. It must be remembered, in comparing the costs and consumption of fuel per engine mile on the G.N.R. with those on the G.S.R., that the coal used by the former was much superior to the expensive and troublesome fuel employed on the G.S.R.

The only other important item under running expenses is the amount paid in wages, which totalled £479,600 in 1944 on the G.S.R., and exceeded the sum paid in 1938 by £93,000. In relation to engine mileage, this wages bill works out at 7½d. per mile in 1938, compared with 1s. 2½d. in 1944. The corresponding rates on the G.N.R. were about 5½d. and 8½d. per engine mile. Combining the costs of fuel and locomotive wages per engine mile on the two systems for 1944, the total for

(Continued on page 26)

* Abstract of a paper, "An Analysis of the Financial and Operating Statistics of the Great Southern Railways Company and the Great Northern Railway Company," by Professor B. F. Shields, M.A., to the Statistical & Social Inquiry Society of Ireland

The Longmoor Military Railway

Transportation Training Centre of the Corps of Royal Engineers

*By Brigadier C. A. Langley, C.B.E., M.C.**



*L.M.R. passenger train hauled by 2-8-0 austerity locomotive
"Major-General McMullen"*

IT is a great pleasure to me to welcome you to Longmoor. I hope that we will be able to show you some items of interest and give you an idea of the scope of the training we carry out at this Centre, which is the home of the Transportation Branch of the Corps of Royal Engineers. I have not the time to tell you much about the achievements of this branch during the war, but I think it would be well to bear them in mind when considering the work of this Centre.

Transportation grew from a few Supplementary Reserve Companies into a force one-third the strength of the whole Corps of Royal Engineers. Transportation served the Army wherever they went, in Europe, Africa, Asia, from Norway to Nigeria, from Iceland to Malaya. In 1939, Transportation were the first troops to land in France, where they discharged all the stores and vehicles required for our force, built marshalling yards, and rail-served depots, and collected large stocks of railway material to succour our allies and develop our communications.

Palestine-Syria Railway

After the collapse of France, the Middle East became our main centre of activity. Here we built in one year the Palestine-Syria Railway—170 miles of very heavy construction, including one mile-long tunnel and many bridges. We extended the Western Desert Railway from Mersa Matruh to Tobruk, building at the rate of two miles a day. We developed the Ports of Egypt to serve the Middle East Base, and we supported the Eighth Army from El Alamein to Tunisia, opening and developing the ports of Tobruk, Benghazi, and Tripoli at high speed.

Again, in North Africa, Sicily, and Italy, a similar tale can be told. In Italy we were faced with many difficulties due to the heavy German demolitions, but these were surmounted, thanks largely to the use of the special railway bridges which had been designed early in the war to meet such a contingency. These bridges were so

successful that they were adopted as standard by our American Allies.

When the time came to assault to Hitler's West Wall, Transportation was again to the fore. The construction of "Mulberry" was largely the product of Transportation genius. Port repair and dock operation during the campaign was one of our major tasks. Railways also played a large part in this campaign, and presented a difficult problem due to the severe dislocation and damage caused by our bomber offensive. However, every obstacle was overcome and amongst our achievements were the bridging of the Seine, Maas, and Rhine.

In India and South East Asia, Transportation played an equally important role. It might interest you to know that half the total of the Transportation Force

were members of the Royal Indian Engineers. Not only was great assistance given to the Transportation undertakings of India, but the Burma Campaign was made possible by the large transportation effort combined with air supply. In the Arakan we supplied services of coastal vessels, creek steamers, and country craft of every type. In Burma we built an I.W.T. fleet on the Chindwin carrying our craft in sections over the mountains. Similarly, for the railway we carried locomotives, some complete, some in sections, by air, road and river, to keep communications going in support of the 14th Army.

This brief survey gives you, I hope, the background of the Longmoor war effort, but before telling you something about our present activities, I think it would interest you to know something about the history of this Centre.

Early History of the Centre

Longmoor Camp was built originally to provide accommodation for troops returning from the South African War. These camps were more or less completed by May, 1903, and were originally occupied by infantry regiments. The first railway troops, the old 53rd Rly. Coy., R.E., arrived here in May, 1903, not for the purpose of forming a training centre, but to undertake the movement of a number of huts from Longmoor to Bordon. These were hauled complete by rail, the work taking about 2 years to complete. This project was an ingenious railway enterprise, two 18-in. gauge tracks at 24-ft. centres being laid to carry the trolleys used for transporting the huts, whilst a ship's donkey winch, driven by a steam boiler, provided the motive power, assisted by a couple of farm horses. The method of locomotion was to haul out a cable, fasten it to a tree, and then wind in on the winch, thus hauling the hut forward. The fastest time for the journey of 5 miles was one day.

Having started off in this rather unusual manner, Longmoor gradually began to develop as a permanent home for the railway troops—the 8th Rly. Coy., R.E., arrived in 1905, followed by the 10th Coy. shortly afterwards. The standard-gauge line from Bordon was started in 1906 and



Draughtsman

* Address by the Commandant, Transportation Training Centre, R.E., to members of the Trade and Technical Press, Longmoor, April 30

was completed, with a deviation and level crossing at Whitehill, as far as Longmoor in 1907. The present alignment with the under-bridge at Whitehill was completed in 1909. Some traffic, other than that for railway purposes, was accepted as early as December, 1907.

Up to 1914, annual training of the Royal Anglesey and Royal Monmouthshire militia, the forerunners of the Supplementary Reserve, was carried out on this mili-

tary railway in co-operation with the regular railway units. On the outbreak of the first great war, Longmoor was taken over by the Railway Operating Department which formed a depot and training establishment for all railway troops, although the scope of the training was not nearly so comprehensive as that carried out here during the second great war.

By 1920, the war activities of Longmoor were over, and the task of building up a

peace-time Transportation organisation was commenced. It was clear that in any future war, much larger Transportation forces would be required than could be provided from the small nucleus of regular troops. Consequently, the Supplementary Reserve Scheme was authorised and the various British railway companies were asked to co-operate. Longmoor henceforth became not only the training centre for a small regular cadre, but also for the Supplementary Reserve units which formed the core of the huge Transportation organisation which developed during the recent war. This training commenced in 1925 and continued annually until the outbreak of war.

Activity Between Wars

During the period between the wars, a number of improvements in the training facilities was undertaken. The line to Liss was completed in August, 1933, and the Hollywater line was started as a training ground for the Supplementary Reserve units. The workshops, running shed, and yards were remodelled very much on the lines they are today. During the war, the Hollywater line was completed, and was opened to traffic in June, 1942.

So much for the development of Longmoor as a Training Centre, but further big developments have taken place to make Longmoor the largest Transportation stores depot in the country. When the war started we had only the store sheds in Longmoor yard, and were just developing the Applepie depot. Woolmer stores depot was built in 1941-42, and other depots followed; the last was completed in 1944.

So far, I have spoken about the early history of Longmoor and the development of the material resources of this Centre. I would now like to give you an idea of how the Transportation branch of the corps expanded during this war, and of the steps taken to meet the large training commitment which had to be undertaken.

In 1939 the only Transportation troops available for active service were:—

One Regular railway company—the 8th.

The following Supplementary Reserve

Units:—

One group of railway construction companies.

One group of railway operating companies.

Two docks operating groups.

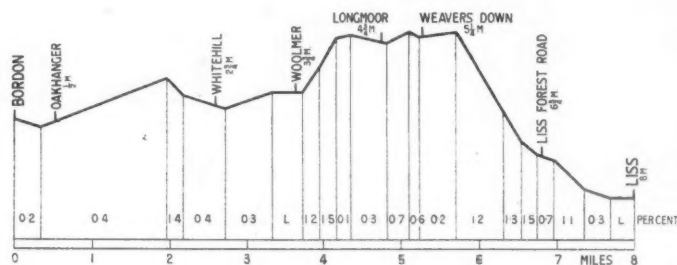
One transportation stores company.

A total strength of approximately 4,000 officers and men.

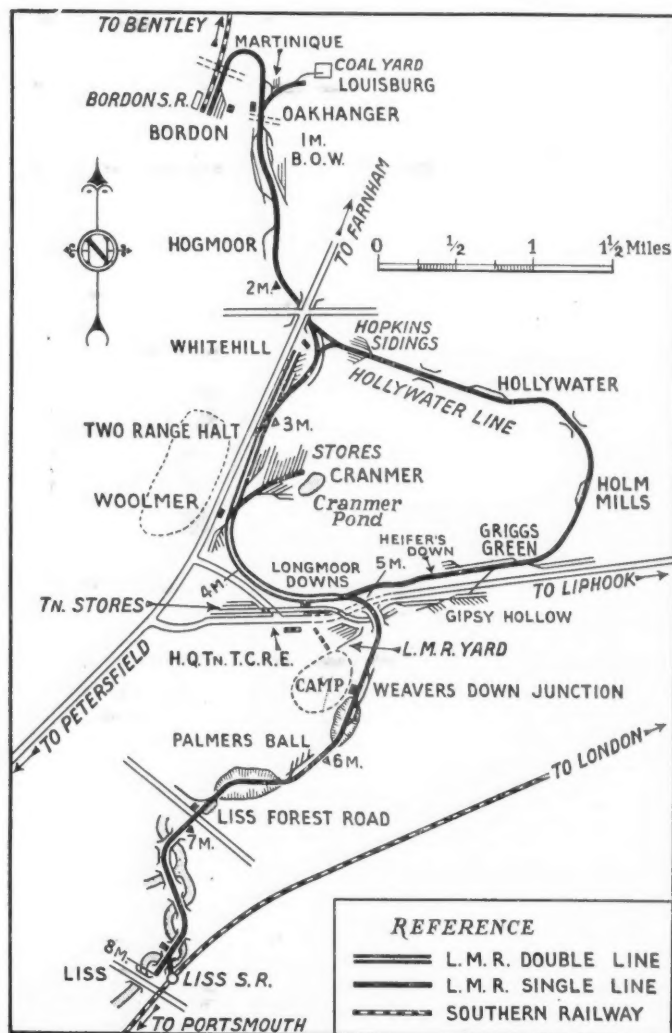
The peak figures reached by Transportation during the recent war were 4,330 officers, 148,000 O.Rs., approximately 50 per cent. of whom were Transportation units of the Royal Indian Engineers.

From 500 to 7,000 Strength

To cope with this growth, Longmoor, which has always been the main Centre, was expanded from a peacetime strength of approximately 500 all ranks, to a peak strength of 7,000 by September, 1942, when it consisted of a Headquarters and four Wings—Fieldworks Training, Technical Training, Collective Training, and Depot. A second Transportation training centre was opened at Derby in 1939 and operated in conjunction with the Melbourne Military Railway—a stretch of line leased from the L.M.S.R. In July, 1941, this Centre was closed down and converted into a Collective Training Wing under the control of the Commandant at Longmoor. This Wing trained Transportation units in heavy bridging and railway construction and continued to operate the Melbourne Military Railway as a training machine for



L.M.R. main line gradient profile



Sketch map of the Longmoor Military Railway

complete railway operating units. This Wing was finally closed at the end of 1944.

The Port Operating Technical Training Wing was formed in 1943, originally located at Penarth, subsequently moving to Barrow, and finally Stranraer. Technical training was given in all port operating trades. This Wing has now been transferred to Marchwood, near Southampton.

In India, two Transportation Training Centres were opened in 1941—Railways at Jullundur, Port and I.W.T. at Deolali and Bombay.

During the war, the following numbers have passed through Longmoor:—

Officers	6,960 including 1,000 for technical training
Other ranks... Trained in technical trades...	27,350
" " " " fieldworks	24,000

In addition, over 80,000 men have passed through the depot to form drafts for new units or reinforcements.

LIST OF TRADES TAUGHT AT TRANSPORTATION TRAINING CENTRE, R.E., LONGMOOR

Railway Construction:

Draughtsman (railway or port construction), that is, civil engineering draughtsman

Fitter (railway signal)

Platelayer

Rigger

Steelwork erector

Storeman (technical and departmental)

Surveyor (engineering)

Railway Operating:

Blockman, that is, signalman

Brakeman and shunter

Checker

Clerk (railway)

Clerk (general duty)

Fireman (locomotive)

Railway engine driver (diesel)

Railway engine driver (steam)

Traffic operator

Railway Workshops:

Boilermaker

Carriage and wagon repairer

Driver transportation plant (construction)

Electrician (wireman)

Fitter locomotive (diesel)

Fitter locomotive (steam)

Riveter

Sheet-metal worker

Welder

General Corps Trades:

Blacksmith

Carpenter and joiner

Coppersmith

Driver (crane)

Engine hand (I.C.)

Engine fitter (I.C. and pumps)

Fitter (M.E.)

Fitter (R.E.)

Fitter (S.R.)

Machinist (metal)

Machinist (wood)

Millwright

Moulder

Operator (excavator)

P. & D.

Patternmaker

P. & P.

Sawyer

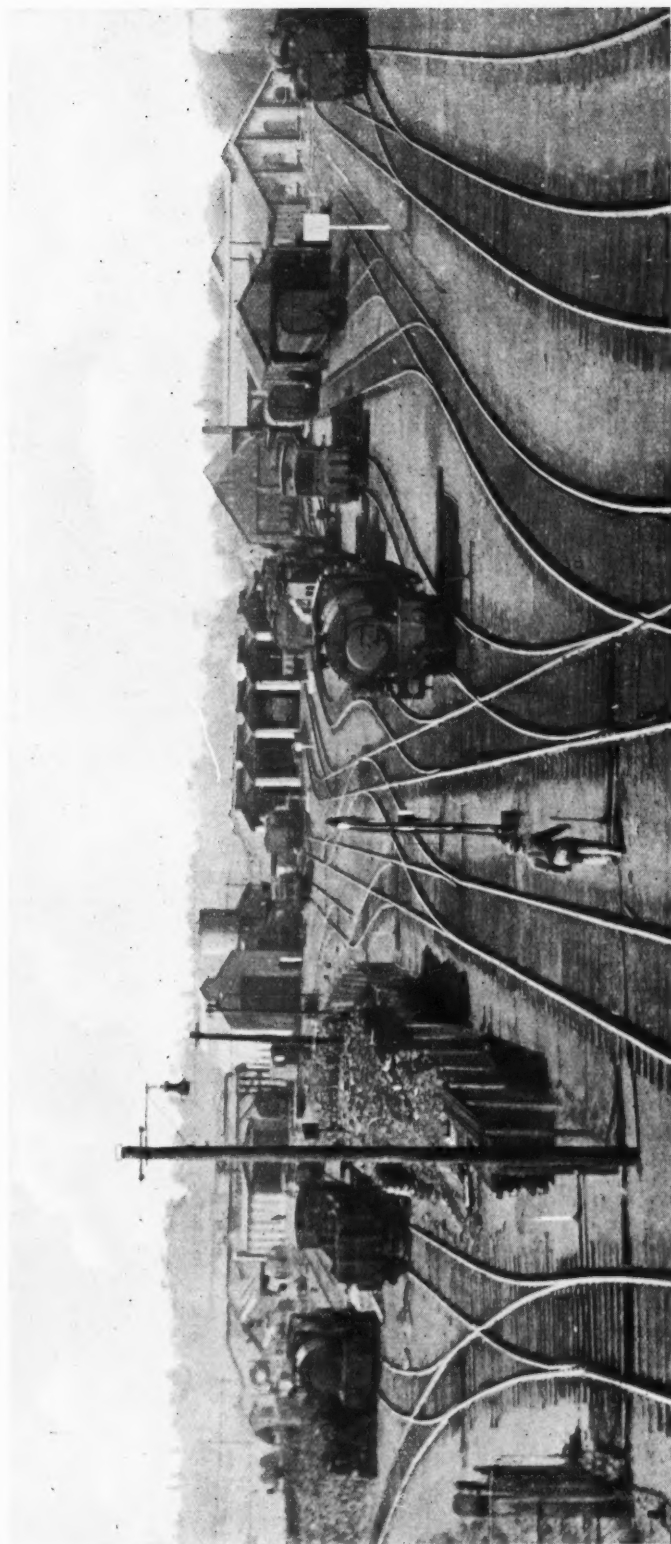
Stoker (S.E.)

Tinsmith

Turner

The staff to run this machine has been drawn from every branch of civil transportation, and all credit is due to those officers and men who, throughout the years of the war, worked so successfully to produce the personnel to form units which played such a leading part in all theatres of operation.

As regards our present task, we are faced with the problem of releasing a vast majority of our experienced staff to civil life, and at the same time, training up the new intake on the traditions of the old. The recruits coming forward today have not got the same experience as most of those who came to us during the war, and in consequence, we have to give them longer training. You will see during the course of your visit how we are undertaking this work.



Running sheds, stores, and workshops, Longmoor Military Railway



Preparation of 2-8-0 locomotive "Major-General McMullen" in the running shed at Longmoor

I would now like to give you an idea of our present organisation. This Centre consists of a Headquarters, divided into an administrative and technical side. The former is responsible for the smooth running of the machine, the latter for technical instruction and operation. There are now only two Wings at Longmoor—the Technical Training Wing responsible for holding and administering all troops and permanent staff of the Centre, and the Depot Wing responsible for holding and dispersing personnel returning from overseas, either for release or reversion to the home establishment, and for forming new drafts for our overseas units.

Organisation

The technical side at Longmoor is supervised by the Chief Instructor and is divided into three main departments, each under a Senior Instructor:—

Railway construction (including survey and bridging).

Railway operating (traffic and locomotive).

Railway workshops.

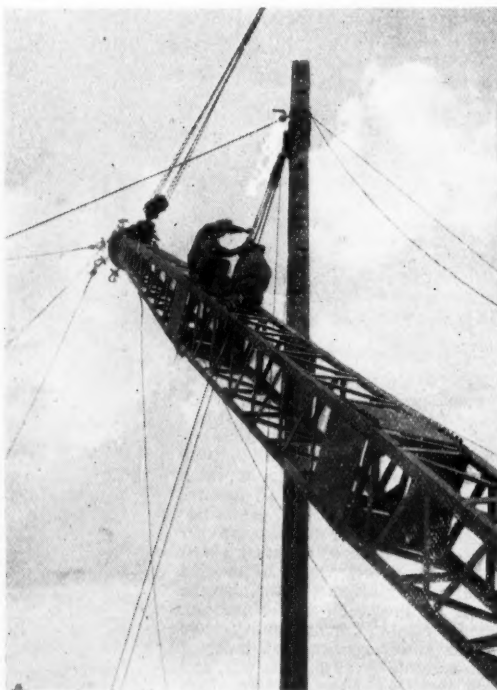
The total technical staff is 619 (22 officers, 539 other ranks and 58 civilians), and the three departments have strengths of 172, 300, and 133 respectively. This staff is responsible for technical instruction of all officers, cadets, and other ranks, and also for maintaining the training machine itself, that is, the Longmoor Military Railway.

The training machine was capable of turning out 600 other rank initial trainees per month in corps trades peculiar to the Transportation branch. However, due to the reduction in our army and the release of personnel to civil life, numbers under training have dropped considerably, so that, at the present moment, we have only some 200 trainees under instruction.

Altogether we have given instruction in some 42 trades, including a number of trades common to the rest of the Corps.



Storemen



Riggers

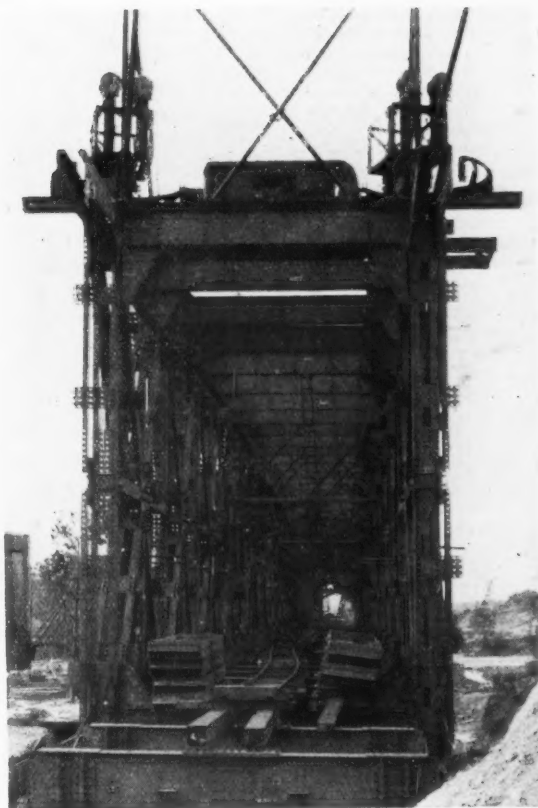
The lengths of the courses vary according to the type of trade and its technical implications. For example, a checker can be turned out in 2 weeks, whereas draughtsmen require 12 weeks and machinists (metal) 16. It should be appreciated that personnel posted to the Transportation branch have been, for the most part, specially selected for their aptitude or previous experience, and the syllabi were compiled to give intensive instruction in the military aspect of the relevant trade to be learnt.

Encouragement

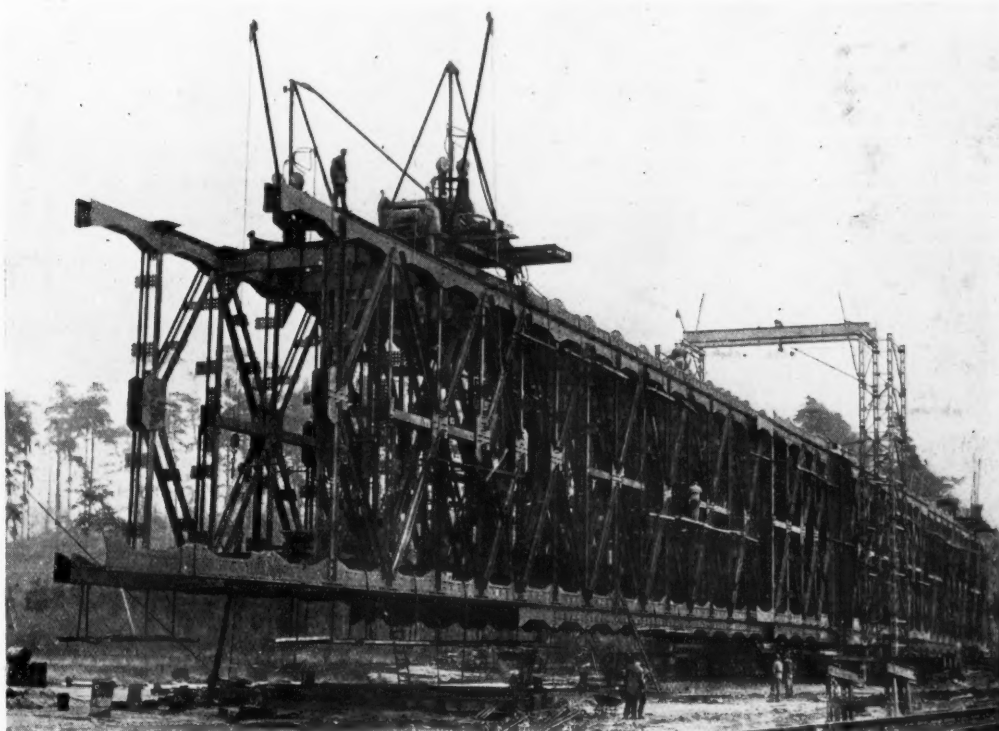
When any trainee shows marked ability, his course is cut short and he is made available for taking his place in a unit without further training. Conversely, when a man is slow to assimilate instruction, but is considered a potential tradesman, he is given extended training to make the grade. Very few men have ever turned out as failures after completing their courses at Longmoor. It is the proud boast of the Instructional Staff that the oft-repeated opinion of Unit Commanders in the field has been: "You can tell a Longmoor-trained sapper anywhere, but you can't tell him much."

It is the policy of the corps that every tradesman, be he clerk, railway engine driver, or storeman, should be trained basically as a sapper capable of turning his hand to any job of field engineering when on active service. Up to recently, practically all trainees went through a short fieldworks course at this Centre, to give them this general training. However, with the reduction in the size of the Corps, it has now become necessary to concentrate this training at R.E. training battalions.

The success of a training establishment relies very largely on the efficiency of its instructors. At this Centre, great care



View through Everall sectional truss bridge



Everall sectional truss bridge : Construction of 320-ft. span by cantilever method

has always been taken in their selection, to obtain men with first class experience, either civil or military, but preferably both.

Although the normal tour of instructional duty was 12 months, it was necessary to retain many of the staff for much longer periods; consequently many whose ambitions lay in a much more active field of operations were obliged to remain at this Centre, sacrificing chances of promotion overseas. Thus many instructors on leaving the Army have little tangible evidence of the yeoman service they rendered during the war, but they can rest assured that their work was fully appreciated.

Minimum Theory: Maximum Practice

To obtain speedy results, instruction in theory has been cut to a minimum and as much time as possible has been spent on the practical side of the work. The practice is, and has been, to make the trainee think for himself and not to attempt a "parrot fashion" type of tuition. Whenever possible, the class is encouraged to ask questions and to discuss the answers among themselves, steered in the correct channels by the Instructor. Wherever practicable, drawings, models, and component parts of equipment are displayed during the instructional periods, but demonstrations and handling of the full-size article is always covered at every available opportunity. Every trainee keeps a notebook which is periodically inspected by the Instructors. With few exceptions, these books are of a high standard.

It may be opportune to mention some of the characteristics of the principal item of our facilities for training—the L.M.R. Inaugurated as a purely instructional railway with originally only a very small domestic commitment of freight traffic, it rapidly developed between 1942 and 1944, and functioned as a serving line for Tn. Stores Sub-Depots which had been sited on the many suitable areas adjacent to the line. Hence, railway operating, which, before 1942, had been a training expedient, became of vital importance in the reception and despatch of large quantities of strategic stores. And so, the trainee blockmen, brakemen, and shunters, yard masters, train crews, and traffic operators, found themselves producing something really tangible in the way of results. This is considered the best type of training, one to which the trainee most readily responds and which gives the instructor more opportunities for assessing a potential tradesman's practical worth.

The increase of traffic on the system made greater demands on the maintenance of permanent way. Heavier locomotives were put into service; the first type was L.M.S.R. Stanier 2-8-0s with 6-wheel tenders—the precursor of the Ministry of Supply austerity 2-8-0s and 2-10-0s, and American "Consols" which arrived later. Due to the rather "slack" road bed, increased attention had to be given to the formation and to ballasting, whilst severe

Naturally, the workshops were directly affected by the increase in traffic, and expanded their activities. Increased overhaul of locomotives and rolling stock became necessary. Additional commitments were experimental work in connection with the planning of the ultimate attack on the French beaches, and much labour was expended in constructing various loading "mock-ups," slinging equipment, etc., etc.

Unfortunately, the workshops site at Longmoor is not so well laid out as might be desired, due in the main to its rather humble beginnings and the need for economy in peacetime. On the other hand, the plant and machinery is fairly comprehensive and steps have been taken to replace older types of machine with more up-to-date equipment. It is not possible to undertake all major repair work on locomotives, but we can cover most of the normal maintenance work resulting from heavy service on the L.M.R.

It is interesting to note that the proposal to use colour-light signals on military railways is to be implemented, and experimental work has been recently undertaken on the Longmoor Military Railway. In the near future, certain sections will be equipped with this type of signal.

The running sheds were not built to give covered servicing accommodation for the number of locomotives in steam during the peak periods of traffic during the war. Nevertheless, by improvisation of coaling facilities, etc., the locomotive staff met all the demands of the traffic department, and the men in training work under more or less active service conditions.

Unfortunately, the geographical limits of the Longmoor Military Railway prevent a reproduction of the long hauls associated with lines of communication, but by using the Hollywater Branch and a section of the main line as a circular track 6 miles in length, it is possible to give train crews some experience in handling freight trains of 1,000 tons.

In conclusion, I would remind you that we are but one branch of the Corps of the Royal Engineers, a Corps whose splendid traditions of service go back into the dim past of military history. At the present time we are saying farewell to many experienced officers and men who are returning to civil life, but we look forward to finding new recruits to take their place, and to carry on the traditions of the Corps, which can best be summed up in our motto:—

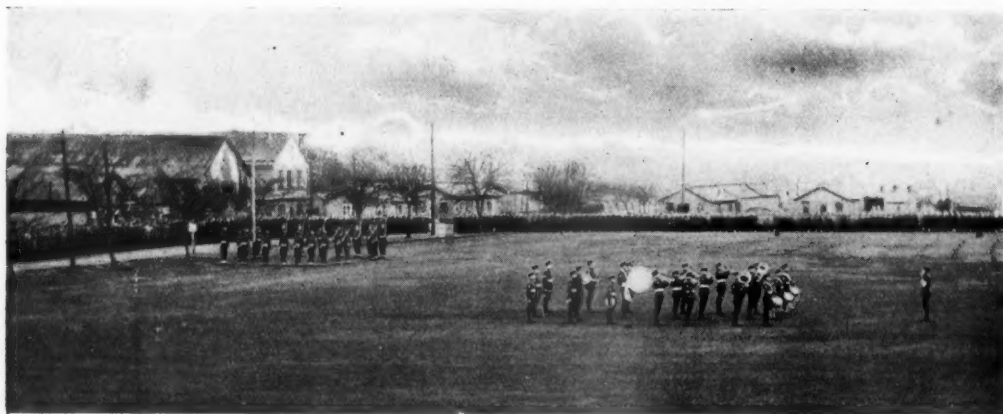
Quo Fas et Gloria Ducunt

COMMANDANTS AT LONGMOOR			
<i>Officer Commanding Troops:</i>			
Major F. G. Fuller...	...	...	1905-1906
Captain C. G. Fuller...	...	...	1906-1907
Major D. H. Ridout...	...	...	1907-1910
Major C. G. W. Hunter...	...	...	1910-1911
Lt.-Colonel H. J. Twiss...	...	...	1911-1914
<i>Commandants, Rly. Tng. Centre, R.E.:</i>			
Colonel H. Sinclair...	...	...	1914-1919
Colonel A. G. Stevenson...	...	...	1919-1920
Lt.-Colonel C. E. G. Vesey...	...	...	1920-1923
Lt.-Colonel A. Brough...	...	...	1923-1925
Lt.-Colonel J. Day...	...	...	1925-1929
Lt.-Colonel E. Woodhouse...	...	...	1929-1930
Lt.-Colonel L. Mantou, D.S.O., O.B.E....	...	...	1930-1935
Lt.-Colonel J. P. S. Greig...	...	...	1935-1937
Lt.-Colonel D. J. McMullen, D.S.O....	...	...	1937-1939
Lt.-Colonel R. D. Waghorn...	...	...	1939
Brigadier W. G. Tyrrell, D.S.O....	...	...	1939-1941
Brigadier R. D. Waghorn...	...	...	1941-1942
<i>Commandants, Tn. Tng. Centre, R.E.:</i>			
Brigadier H. A. Joly de Lotbiniere, M.C.	...	...	1942-1946
Brigadier C. A. Langley, C.B.E., M.C. ...	...	...	1946

curvature, coupled with light 75-lb. rail, kept platelayers busy.

Although the additional track laying in the new stores depots was undertaken by railway construction companies sent here specially for the work, the large earthworks required in levelling and draining the areas was undertaken by the mechanical equipment section of this Centre, and proved the most profitable training medium for drivers T.P. The work was of the highest priority. Instructors and trainees tackled the job enthusiastically, putting in long hours, often under trying weather conditions, and completed the work to time.

In addition to the maintenance of increased route mileage, the Construction Department had to strengthen many of the bridges to carry the increased axle loadings. The longest bridge—98-ft. span over the east end of Longmoor Yard—was reconstructed, and most of the others were strengthened by introducing deeper joists and adjusting the abutments and piers to suit. A 300-ft. timber bridge on the main line was replaced by an embankment, the work being carried out by trainees without interruption to the Operating Department.



Ceremonial sounding of "Retreat" at Longmoor

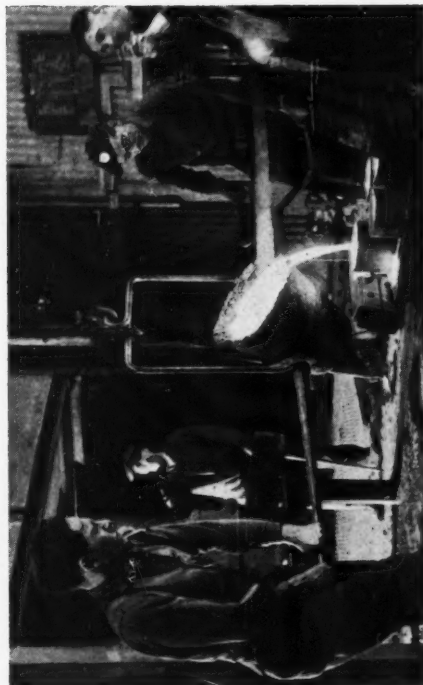
The Longmoor Military Railway



Signalling School



Longmoor Downs signal cabin: Double wire system

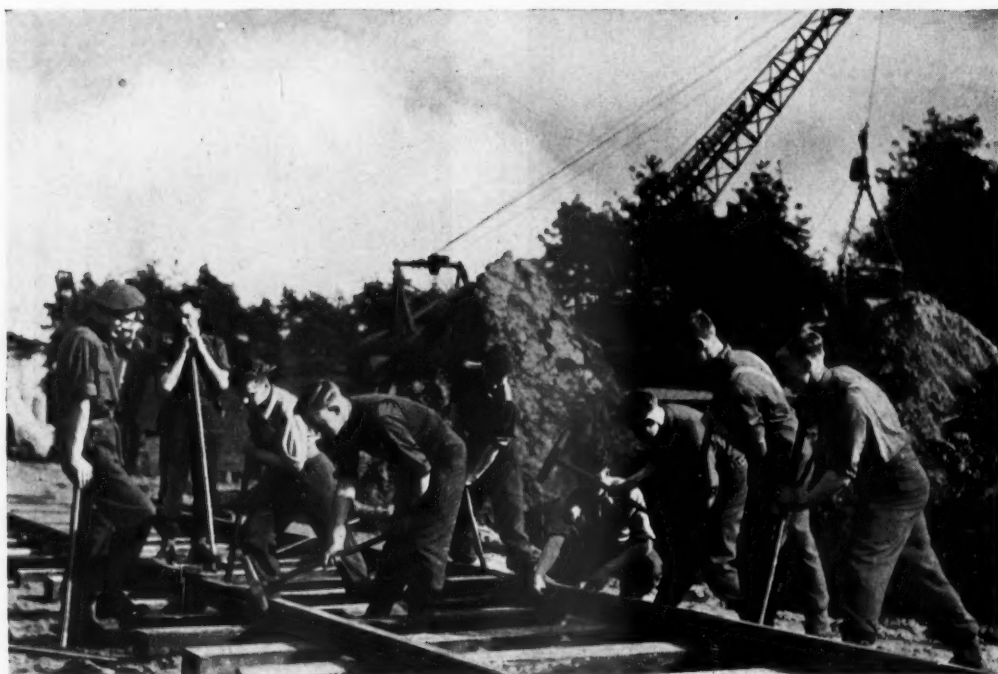


The foundry, L.M.R. workshops



Engine driver

The Longmoor Military Railway

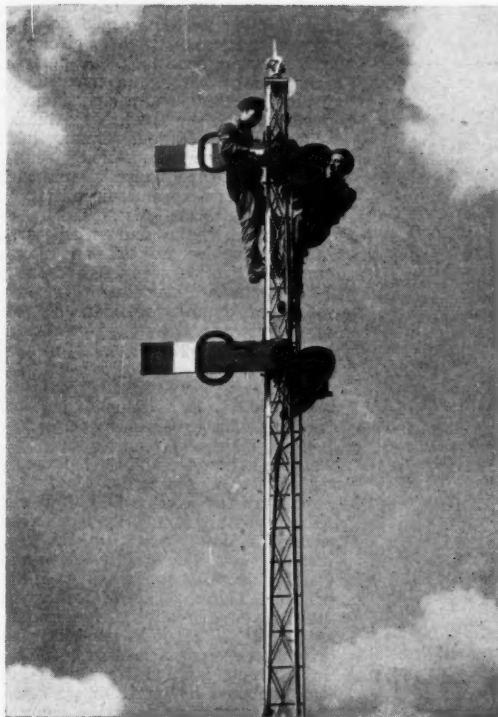


Officer cadets on platelaying instruction



Wagon repair work in progress at Longmoor

The Longmoor Military Railway



Signal fitters



Surveyors



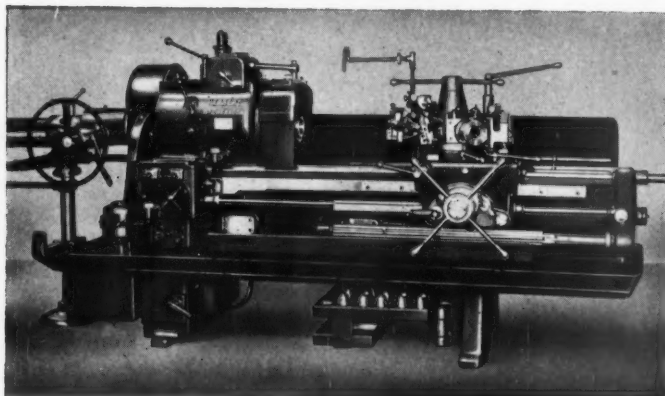
Engine cleaner



Machinist

A New Hexagon Turret Lathe

The latest Alfred Herbert No. 2 model incorporates new features to meet modern demands in metal machining



THE first Herbert hexagon turret lathe, introduced in 1897, contained essentially the same elements—a bed, a headstock, and a turret slide with automatic feed—as the types of the present day, the entire design, in fact, being based on the use of box tools for turning. The tools being easily set, quantities as small as 2-3 articles can be machined economically, and less time is needed than when using a centre lathe.

In designing the No. 2 hexagon turret lathe, new features have been introduced to meet the needs of modern technique in machining metals. The roller-bearing headstock, in combination with a two-speed motor drive, provides a range of speeds for all operations from high-speed turning with carbide tools to screwing high-tensile steels. Durability and the maintenance of original alignment are ensured by the bed, the asymmetric guiding surfaces of which are hardened by the firm's Flamard process (478-555 Brinell) and are protected by sliding covers. All the electrical equipment is built into the

machine. Two Chipstream boxtools are included in the standard equipment to enable full advantage to be taken on bar work of negative-rake Ardoloy tools.

The headstock of the lathe is of the dial change type, driven by a two-speed motor providing $7\frac{1}{2}$ h.p. for the eight turning speeds from 80 to 1,520 r.p.m., and 2 h.p. for the four screwing speeds, from 20 to 71 r.p.m. A switch lever on the headstock is used to effect the change from turning speeds to screwing speeds.

All speeds are reversible. Any one of four pairs of fast and slow speeds is selected by rotating the dial, and an instantaneous change from fast to slow or vice versa is made by moving the lever immediately above the dial. This change is made without stopping the spindle, but the dial is interlocked with the starting and reversing lever, which must be moved to the neutral position before the dial is operated. Alternatively, the starting lever cannot be moved before the sliding gears are fully in mesh. A self-adjusting multi-disc brake is applied automatically when

the starting lever is brought to the neutral position.

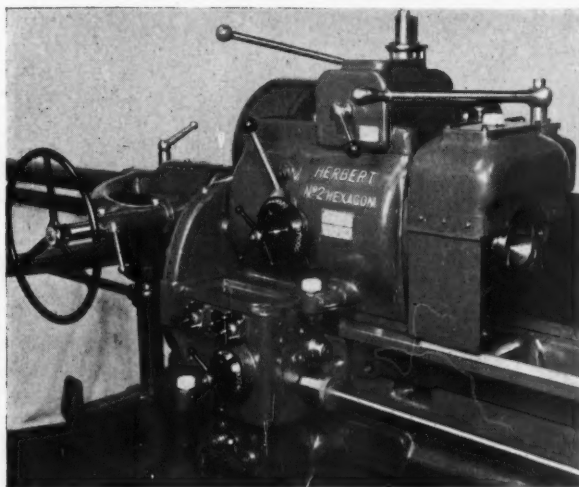
The spindle, with hardened flange, is mounted in ball and roller bearings. All shafts run in ball bearings, and the gears are of alloy steel, hardened and ground. Particular attention has been given to lubrication of the headstock. A pump circulates the oil through a magnetic and a gauze type filter, and a sight indicator on the headstock shows when the lubrication system is in operation. Cutting lubricant is supplied by a motor-driven centrifugal pump. The supply pipe travels with the turret. If required, internal oil supply can be arranged to the holes.

The main motor and switchgear, built into the machine, will take any alternating current supply between 200 and 550 volts, 2- or 3-phase, 50 cycles. The two-speed motor, on a hinged platform at the rear of the machine, has a high overload capacity and is amply protected from moisture and swarf.

The starter, isolator switch, and fuses are mounted on the left-hand leg of the machine, with push-buttons below the feed box for main and pump motors. A red warning light on the panel indicates when the isolator switch is on.

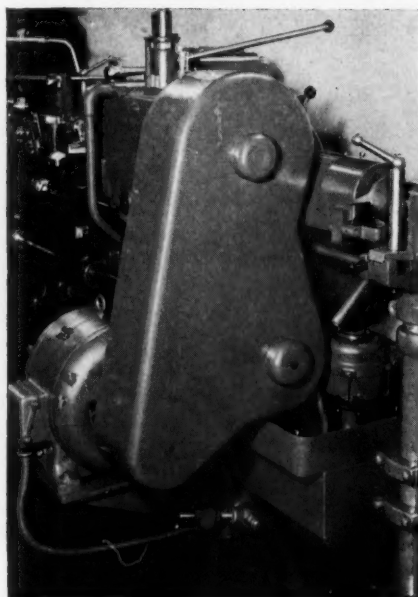
Bars are gripped in a 2-in. double-toggle chuck, on the spindle flange, having an accurate and very powerful grip. It is adjustable $\frac{1}{16}$ in. above and below nominal diameter to allow for variations in the size of bars. Thirteen sizes of hardened conical holders are supplied for round bars from $\frac{1}{2}$ in. to 2 in. These holders are recommended for black bars. Unhardened holders should be used for second-operation work and for bright drawn bars.

The bar feeding mechanism incorporates a patent wood-lined bar stock tube which minimises the noise of rotating bars. The tube swivels out of alignment at the front end for the insertion of bars, which can be fed forward by hand-wheel and chain right up to the back of the chuck jaws, with a minimum of waste. To reduce the whipping effect of small-diameter bars, split supporting bushes are used to support the bar at the front of the tube. Four of these bushes (for 1 in., $1\frac{1}{4}$ in., $1\frac{1}{2}$ in., and 1 in. bars) are included in the standard outfit of tools and can be used



Above: Headstock and general arrangement of controls

Right: Rear of lathe, showing main driving motor and the sight-feed lubricator on the headstock



for round, square, or hexagon bars, but are liable to more rapid wear when supporting squares and hexagons.

When it is necessary to prevent damage to the corners of these latter bars (particularly in soft materials) and to reduce wear in the wood-lined tube, a revolving holder can be supplied together with suitable split supporting bushes. The holder may also be used for round bars with the appropriate supporting bush. The revolving holder is fitted in the end of the bar support tube and rotates in a needle roller bearing. The maximum sizes of bars requiring supporting bushes are: Round, $1\frac{1}{2}$ in. diameter; hexagon, $1\frac{5}{8}$ in. across flats; and square, $1\frac{1}{8}$ in. across flats.

Six Automatic Feeds

The dial-operated feed box, protected by an overload slipping clutch, provides six changes of reversible automatic feed, from 20 to 240 cuts an inch, to the turret slide. The feeds are controlled by six self-selecting trips and dead stops, one to each face of the turret. The operator is relieved of fatigue, when moving the turret slide, by a quick power-traverse motion which acts in either direction. An important safety feature is that the pilot wheel for hand operation of the turret slide is automatically disconnected and remains stationary when either the quick power motion or automatic feed is in use.

Turret rotation is effected by a pilot wheel, having three levers raised well above the tools. A scale and an adjustable pointer on the turret slide facilitate the setting of length dimensions. The turret slides on two asymmetric guides on the bed. These guides are protected by sliding covers on the turret slide nearest the headstock, and

are cleaned by felt wipers on the right-hand side. This arrangement, in conjunction with the roller-bearing spindle, ensures accurate alignment for many years. The front of the turret slide is provided with a lip to divert chips and suds to the sides of the apron, and additional protection is afforded by a cover over the feed shaft.

High Speeds without Seizure

Until Chipstream boxtools were introduced, it was not practicable to use Ardoloy and other carbide tools in ordinary roller boxes, as the high speeds required caused the rollers to seize on the pins and the turnings often choked and damaged the tool. The rollers in the Chipstream box tool, however, are mounted on needle-roller bearings, enabling the highest practicable speeds to be used without seizure.

The Ardoloy-tipped tool with chip control groove enables large reductions in diameter to be made in one cut. The groove coils up the turnings and diverts them into the machine tray. On completion of the cut, the tool can be withdrawn from the work to avoid both damage to the cutting edge and also marks on the finished diameter when moving back the turret slide. Since the rollers have no front support to cause obstruction, the box tool can turn right up to a shoulder.

A roller-steady turning tool is also included in the equipment. The roller-steady slides are adjusted to the work by screws, but can be released and quickly withdrawn without affecting the adjustment, and instantly returned to their original setting. The roller-steady box tool therefore has the advantage of turning reduced diameters behind a shoulder.

Threading is done with a $1\frac{1}{2}$ in. Coventry

diehead supplied with nine sets of dies to cut threads from $\frac{1}{2}$ in. to $1\frac{1}{2}$ in., Whitworth or B.S.F. Alternatively, a $1\frac{1}{2}$ in. Tangel or Landmatic diehead or $1\frac{1}{2}$ in. Coventry diehead can be supplied. A triple tool holder—which normally carries an adjustable bar stop, a sensitive centring tool, and a roller-steady ending tool—has the effect of adding two extra faces on the turret.

Equipment can be supplied by the maker for producing locomotive boiler staybolts. For stays from 12 in. to 30 in. long, the threads on the two ends of the stay are cut simultaneously in continuous pitch by a diehead mounted on one face of the turret and a second diehead carried on an adjustable ram at the rear. The turret is cut away on the face opposite the front diehead to enable the rear diehead to pass inside for screwing the shorter stays.

Threads up to $1\frac{1}{2}$ in. diameter can be cut with Coventry dieheads, and up to $1\frac{1}{2}$ in. using Tangel or Landmatic dieheads. The centre portion of the stay is reduced with a roller box tool.

A short staybolt attachment is supplied for stays from $6\frac{1}{2}$ in. to 12 in. long and with maximum thread diameters the same as those for long staybolts. A bracket supports a second diehead in front of the one bolted to the turret face. When very short stays have to be machined, a single diehead can be used to screw the whole length of the stay, and the centre portion is afterwards cleared away.

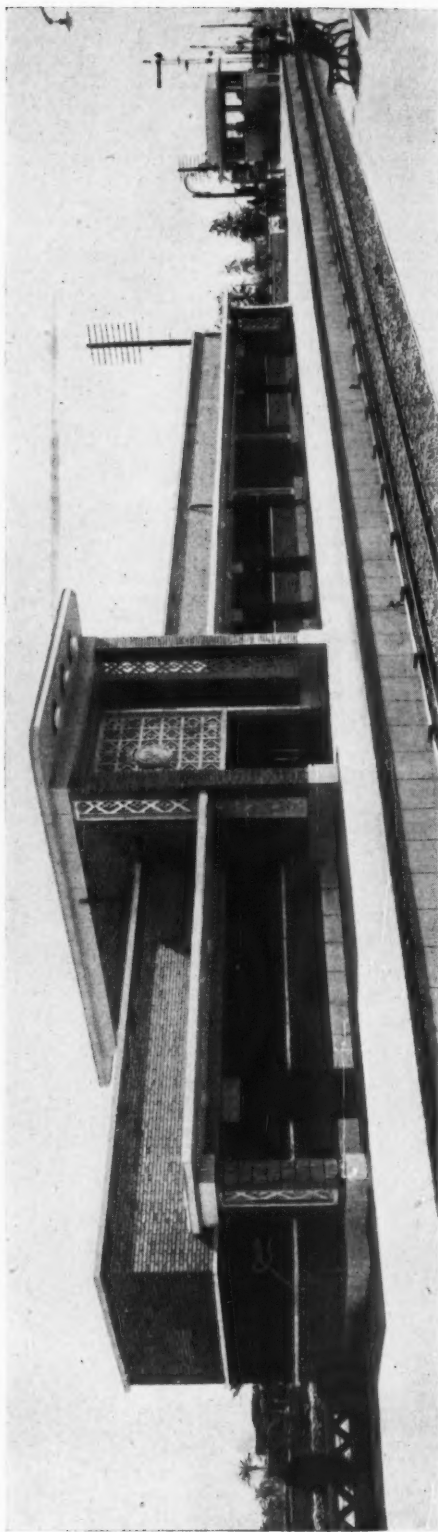
If a machine is required with both long and short staybolt attachments, only three dieheads are required, as the front diehead for the long attachment can be used as the rear diehead for the short attachment.

Hawkesbury River Bridge, New South Wales

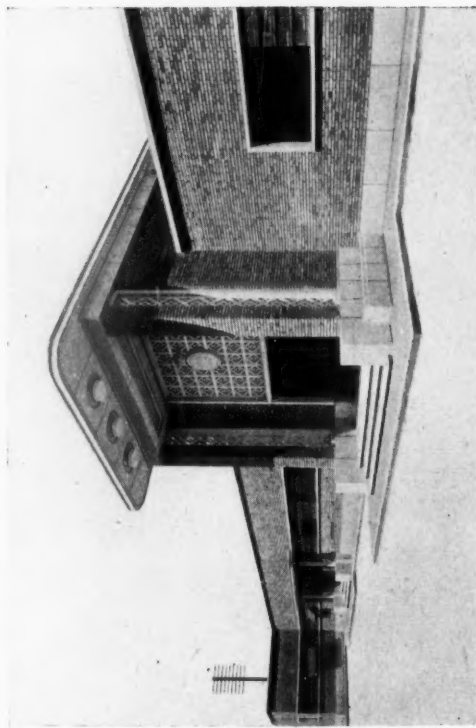


Floating a 147-ft. span into position in the new bridge, which was opened on July 1 (see page 8). The old bridge is seen on the right

Railway Architecture in Egypt



New station buildings of distinctive design at El Faruqiya, on the main line of the Egyptian State Railways from Cairo to Zagazig



Entrance to El Faruqiya Station



Standard design of concrete signal box at Palais de Qubba

RAILWAY NEWS SECTION

PERSONAL

Sir Ewart Smith has been appointed a Director of the London Midland & Scottish Railway Company. Sir Ewart Smith, who is Technical Director of Imperial Chemical Industries Limited, has been associated with it and its subsidiaries since 1923. He was Chief Engineer & Superintendent of Armament Design at the Ministry of Supply during the war. He received the honour of knighthood in the New Year Honours List, 1946.

The Hon. Walter Leslie Runciman, O.B.E., A.F.C., has been appointed a Director of the London & North Eastern Railway Company, to fill the vacancy on the board created by the death of Sir Murrrough J. Wilson.

Sir Archibald Rowlands has been appointed Permanent Secretary of the Ministry of Supply, in succession to Mr. Oliver Franks, who has been released to take up his appointment as Provost of Queen's College, Oxford.

We regret to record the death on June 26, at the age of 73, of Mr. Graves William Eves, M.A., M.A.I. (Dublin), M.Inst.C.E., a Director of the Barsi Light Railway Co. Ltd. Mr. Eves was that company's Chief Engineer from 1913 to 1920, and Agent & Chief Engineer from 1920 to 1931.

Mr. L. M. Parker, Chief Assistant Engineer of the Birmingham & Midland Motor Omnibus Co. Ltd., has been appointed Chief Engineer of the South Wales Transport Co. Ltd.

The Council of Industrial Design has appointed Mr. N. E. Kearley as Deputy-Director.

L.N.E.R. APPOINTMENTS

Mr. J. H. Fraser, Chief Assistant (Signals), Engineer's Office, York, to be Assistant to Engineer (Signals), York, in succession to Mr. C. Carslake, who has retired from the service.

Mr. J. Blundell, Locomotive Shedmaster, March, to be District Locomotive Superintendent, Peterborough, in succession to Mr. E. H. Baker, recently appointed District Locomotive Superintendent, Gorton.

Mr. H. L. Hopkins, Assistant District Goods & Passenger Manager, Ipswich, to be District Goods & Passenger Manager, Lincoln.

Mr. H. Arnott, Assistant Superintendent, North Eastern Area, retired from the service at the end of June, and Mr. H. F. Pallant, District Superintendent, Hull, has been appointed to succeed him.

Mr. J. W. Dedman, Assistant District Superintendent, Edinburgh, to be Assistant District Superintendent, Glasgow.

Mr. Keith Brinsmead, D.S.O., Assistant to the Permanent Way Engineer (Railways), L.P.T.B., who recently returned from war service as Lt.-Colonel, R.E., has been awarded the Legion of Merit by the United States Government.

Mr. Herbert Kelway-Bamber, M.V.O., whose death, at the age of 83, was recorded in our June 14 issue, was President of the Institution of Locomotive Engineers for 1930-31. He was educated at University College School, King's College, London, and the Royal School of Mines. He was trained as a locomotive engineer at the Brighton works of the L.B.S.C.R. under the late Mr. William Stroudley, and was for some years on the India Office



The late Mr. H. Kelway-Bamber
President, Institution of Locomotive Engineers,
1930-31

staff of Inspectors under the late Sir Alexander M. Rendel. Mr. Kelway-Bamber went to India in 1891, and in the next year was appointed Assistant Superintendent of Rolling Stock, East Indian Railway, of which he was Superintendent of Rolling Stock from 1902 to 1907. He was deputed by the Viceroy to design and build the royal train used by King George V for his journeys over broad-gauge railways of India in 1905 and 1912; the train, which was constructed in the carriage works at Lilloah, introduced an entirely new type of rolling stock, which was afterwards adopted throughout India and the East. In 1907 Mr. Kelway-Bamber joined the Leeds Forge Co. Ltd. as its representative in London, and he was General Manager of that company from 1925 to 1928, when he joined the Sentinel Waggon Works Limited, with which he served until his retirement in 1933. As recently as May 1 last Mr. Kelway-Bamber read a paper, "Coal and its Post-War Carriage on British Railways" (an abstract of which appeared in our May 10 issue), before the Institution of Locomotive Engineers.

The following announcements appear in the Fifth Supplement to *The London Gazette*, dated June 21, under the heading of Territorial Army—Royal Engineers: Engineer & Railway Staff Corps:—

Percy Croom-Johnson (48307), late T.A.R.O., to be Lt.-Colonel, March 6, 1946.

Henry George Sayers (366294) to be Major, December 25, 1945.

Mr. Croom-Johnson is Chief Engineer (Civil & Electrical), L.P.T.B.; and Mr. Sayers is Superintendent (Scottish Area), L.N.E.R.

M. Leon Feline and M. Charles Trede, technical experts of the Marseilles Tramways, and M. D. Peyrot, M. R. Latar, and M. Pierre Estienne, Councillors of the Marseilles Municipality, have arrived in London to study the L.P.T.B. tube railway and trolleybus systems with a view to creating similar transport facilities in Marseilles.

Mr. Ivor Cooper (Lever Bros. & Unilever Limited) has completed his year of office as Chairman of the Council of the British Export Trade Research Organisation; and the Deputy-Chairman, Mr. Leslie Gamage (Vice-Chairman & Joint Managing Director of the General Electric Co. Ltd.), has been elected Chairman for the ensuing year. Mr. Gamage is succeeded as Deputy-Chairman by Mr. C. Percy Lister (Chairman of R. A. Lister & Co. Ltd.).

INDIAN RAILWAY STAFF CHANGES

Khan Bahadur M. D. Sheik, Director, Establishment, Railway Board, has been granted two years' leave preparatory to retirement as from February 25.

Mr. K. Durai has been appointed to officiate as Director, Projects, Railway Board.

Dr. H. J. Nichols has been confirmed as Member, Engineering, Railway Board.

Mr. R. Ramaswami Iyyar has been appointed to officiate as Director of Finance, Railway Board.

Mr. Yakub Shah has been appointed to officiate as Director, Accounts, Railway Board, as from April 1, in place of Mr. D. C. Campbell, granted leave preparatory to retirement.

Mr. R. S. Vipan has been appointed Chief Controller of Railway Priorities, War Transport Department, as from May 16.

SOUTHERN RAILWAY STAFF CHANGES

Mr. C. Gribble, Deputy Chief Civil Engineer, retires on August 1.

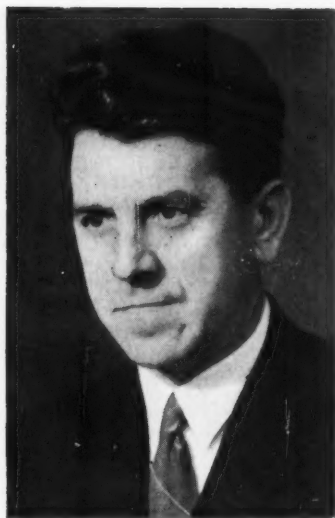
The following appointments take effect from the same date:—

Mr. A. Dean, Maintenance Engineer, to be Assistant Chief Civil Engineer.

Mr. A. B. Chester, Assistant Engineer (General), to be New Works Engineer.

Mr. F. E. Campion, Divisional Engineer, London West Division, to be Maintenance Engineer.

Mr. A. H. Cantrell, Assistant Divisional Engineer, London East Division, to be Divisional Engineer, London West Division.



Mr. J. R. Farquharson

Appointed General Manager, Tanganyika Government Railways

Mr. J. R. Farquharson, B.Sc., Chief Engineer, Tanganyika Government Railways, who has been appointed General Manager, attended the Royal Technical College, Glasgow; he graduated B.Sc. at Glasgow University and obtained the diploma of the Royal Technical College in 1923. From then until 1925 he was Junior Assistant Engineer in the Western District, Lowland Division, Glasgow, L.M.S.R. In October, 1925, he was appointed Assistant Engineer, Kenya & Uganda Railways, and later became Senior Assistant Engineer. In May, 1937, Mr. Farquharson was appointed Personal Assistant to General Manager, Tanganyika Government Railways, and in June, 1941, Chief Engineer. From June, 1941, to August, 1942, on a part-time, and from August, 1942, to November, 1945, on a full-time, basis, he was seconded for work in the operation of wartime controls in Tanganyika.

Mr. J. R. Pike, Assistant Chief Commercial Manager (Goods), Watford H.Q.,



Mr. J. R. Pike

Appointed Assistant Chief Commercial Manager, L.M.S.R.

L.M.S.R., who, as recorded in our June 7 issue, has been appointed Assistant Chief Commercial Manager, Watford H.Q., entered the service of the L.N.W.R. in 1914. From 1916 to 1919 he served with the 10th Cruiser Squadron as a Sub-Lieutenant, R.N.V.R. After the war he returned to railway duties, and was later transferred to the Chief Goods Manager's Office, Euston, being appointed in 1923 to the then newly-formed Development Section of the Chief Goods Manager's Office. In 1931 he was appointed Personal Assistant to the Vice-President, and served successively under Mr. John Quirey, Mr. J. H. Follows, and Sir Ernest Lemon. Mr. Pike was made Assistant District Goods & Passenger Manager, Leicester, in 1933, and a year later he was appointed Assistant (Rates Tribunal Section), Chief Commercial Manager's Department, Euston. In 1935 he became Assistant (Research) to the Chief Commercial Manager, and, in 1938, Assistant (Rates & Charges) at Watford. He became Assistant to Chief



Mr. Frank Grundy

Appointed Assistant Chief Commercial Manager (Goods), L.M.S.R.

Commercial Manager (Goods) in 1942, and Assistant Chief Commercial Manager (Goods) in 1944. Mr. Pike is Chairman of the Irish & English Traffic Conference.

Mr. Frank Grundy, A.M.Inst.T., District Goods Manager, Wolverhampton, L.M.S.R., who, as recorded in our June 7 issue, has been appointed Assistant Chief Commercial Manager (Goods), Watford H.Q., joined the Lancashire & Yorkshire Railway at Bury in 1915. He served in the R.N.V.R. from 1917 to 1919, and, after training at stations and district offices, joined the Chief Goods Manager's staff at Euston, L.M.S.R., in 1925. He worked in various headquarters sections from then until 1933, when he joined the then newly-formed Chief Commercial Manager's Research Section. In 1938 Mr. Grundy went to the L.M.S.R. staff college at Derby, and later in the same year became Goods Agent at Accrington. Thereafter he held positions as Goods Agent, Bury (1939-41); Assistant to District Goods Manager, Bol-



Mr. A. W. F. Rogerson

District Locomotive Superintendent, Leeds, L.M.S.R., 1943-46



Mr. L. Edwards

Appointed Operating Assistant to the Superintendent of the Line, G.W.R.



Mr. Ernest Card

Stationmaster, London Bridge, Southern Railway, 1933-46

ton (1941-43); Head of Merchandise Services Section, Chief Commercial Manager's Office (1943); and Goods Agent, St. Pancras & Somers Town (1943-44). He was appointed Assistant to Chief Commercial Manager (Goods) early in 1944, and District Goods Manager, Wolverhampton, in May, 1945. During the recent war Mr. Grundy's services were lent for a period to the Ministry of Food; he served as Assistant Director of Transport, and Deputy Divisional Food Officer (North West), responsible for transport and warehousing.

Mr. A. W. F. Rogerson, who, as recorded in our May 17 issue, is retiring from the position of District Locomotive Superintendent, Leeds, L.M.S.R., was educated at University College School (then Gower Street), and joined the Midland Railway in 1903 as an apprentice fitter at Kentish Town. In 1908 he became Assistant to the District Locomotive Superintendent, Leeds; and in 1913 he was appointed to a similar position at Kentish Town. He acted as District Locomotive Superintendent at Derby from 1915 to 1917, and during the next two years served in France with the Royal Engineers (Railway Operating Division). He returned to the Midland Railway in 1919 as District Locomotive Superintendent, Worcester; and three years later he was appointed to a similar position at Hasland (Derbyshire). He became District Locomotive Superintendent, Kentish Town, in 1934, and District Locomotive Superintendent, Leeds, in 1943. Mr. Rogerson, during the recent war, was Major, in charge of Kentish Town D Company, 16th City of London Home Guard, until his transfer to Leeds in 1943.

Mr. L. Edwards, Assistant Divisional Superintendent, Bristol, Great Western Railway, who, as recorded in our May 10 issue, has been appointed Operating Assistant to the Superintendent of the Line, entered the company's service at Box in 1916. He gained experience in passenger parcels and goods work there, also at Bradford-on-Avon and Corsham, before being transferred to the Divisional Superintendent's Office, Bristol, in 1922. There he undertook varied duties, including outdoor activities in connection with holiday

traffic and the acceleration of passenger trains, until 1935, when he was promoted to the Special Traffic Section of the Superintendent of the Line's Office. In 1939 he was appointed Chief Clerk to the Divisional Superintendent at Chester, and, in 1941, Assistant Divisional Superintendent at Bristol.

Mr. Ernest Card, O.B.E., Stationmaster, London Bridge, Southern Railway, who, as recorded in our May 31 issue, retired on July 1 after 53½ years' service, commenced his railway career with the former S.E.R. at Redhill. After serving in various clerical capacities was appointed Stationmaster at Orpington in 1913, and proceeded to Tonbridge in 1915, Cannon Street, in 1921, and the post at London Bridge, from which he now retires, in 1933. Mr. Card received the O.B.E. during the 1914-18 war, and was awarded the company's 50-years' service Diploma in 1943. He has been a Freeman of the City of London since 1928.

Sir Eric Conran-Smith is the Member for War Transport, Railways, Posts & Air in the reconstituted Executive Council in India.

L.M.S.R. APPOINTMENTS

Mr. J. W. Kerr, Registrar, Secretary's Office, Watford H.Q., has been appointed Assistant Secretary, Watford H.Q.

Mr. G. Hickling, Assistant to Registrar, Secretary's Office, Watford H.Q., succeeding Mr. J. W. Kerr as Registrar, Secretary's Office, Watford H.Q.

G.W.R. APPOINTMENTS

Traffic Department

Mr. H. G. W. Gaut, Assistant to Superintendent of the Line, Paddington, to be New Works Assistant to Superintendent of the Line, Paddington.

Goods Department

Mr. G. Cornish, General & Staff Assistant to Chief Goods Manager, Paddington, to be Principal Assistant to Chief Goods Manager, Paddington.

Mr. T. H. Hollingsworth, District Goods Manager, Bristol, to be General & Staff Assistant to Chief Goods Manager, Paddington.

Mr. A. Bond, Indoor Assistant to Chief Goods Manager, Paddington, to be Assistant to Chief Goods Manager, Paddington.

Mr. A. C. B. Pickford, District Goods Manager, Cardiff, to be Assistant to Chief Goods Manager (stationed at Cardiff).

Mr. H. Bolton, District Goods Manager, Newport, to be District Goods Manager, Bristol.

Mr. R. P. Davis, Assistant District Goods Manager, London, to be District Goods Manager, Newport.

Mr. C. E. Shaw, District Goods Manager, Swansea, to be District Goods Manager, Cardiff.

Mr. R. A. Ryan, Assistant to Chief Goods Manager, to be District Goods Manager, Swansea.

Engineering Department

Mr. C. H. T. Morgan, General Assistant to Chief Engineer, Paddington, to be Assistant Engineer (General) Paddington.

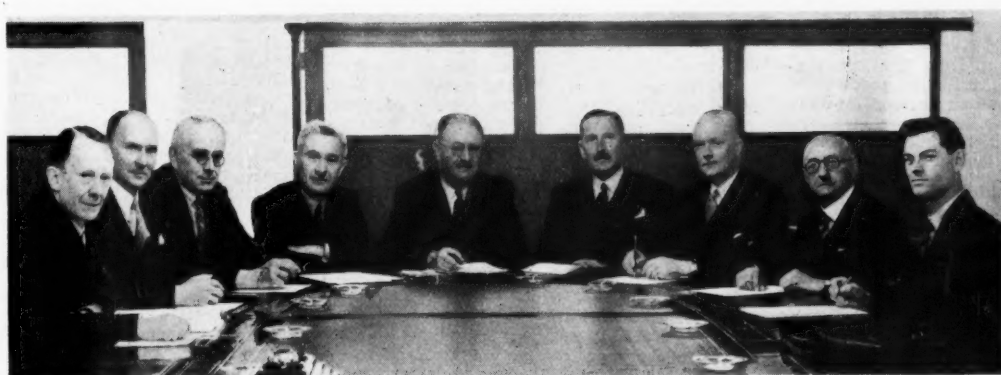
Mr. H. Savage, New Works Assistant, Chief Engineer's Office, Paddington, to be Assistant Engineer (New Works), Paddington.

Mr. M. G. R. Smith, Assistant to Chief Engineer, Paddington, to be Assistant Engineer (Maintenance), Paddington.

Mr. Henry Norman Somerville Fearon, Chief Inspecting Engineer, Sudan Government, received the O.B.E. (Civil Division) in the King's Birthday Honours List.

During a recent visit to London, M. le Besnerais, President of the International Union of Railways, was received on June 25 by the Continental Traffic Managers' Committee of the four main-line railway companies at the Offices of the Secretariat, recently opened at 3, Grosvenor Gardens, London, S.W.1. (as announced in our issue of May 31 last). An apology was received from Mr. A. Evans (Overseas & Continental Traffic Assistant to Chief Commercial Manager, L.M.S.R.), who, through absence from London on other business, was unable to be present. On the same day, M. le Besnerais was the guest of the General Managers at an informal dinner presided over by Sir Charles Newton (Chairman of the General Managers' Conference) at the Great Eastern Hotel, Liverpool Street Station.

Continental Traffic Managers' Committee Receives M. le Besnerais



A photograph taken during the reception of M. le Besnerais, President, International Union of Railways, by the Continental Traffic Managers' Committee in London (see accompanying paragraph)

Left to right: Messrs. H. G. Williams, Secretary, Continental Traffic Managers' Committee; L. W. Conibear, Commercial Assistant to Superintendent of the Line, G.W.R.; W. J. Sawkins, Chief Accountant, Southern Railway; C. Furber, Deputy Chief Goods Manager & Mineral Manager, G.W.R.; M. le Besnerais; L. H. K. Neil, Continental Traffic Manager, L.N.E.R., and Chairman, Continental Traffic Managers' Committee; R. H. Hacker, Continental Superintendent, Southern Railway; F. H. Sedgwick, Assistant to Chief Accountant, L.N.E.R.; and B. Becken, British Railways Representative at International Union Headquarters, Paris

Ministry of Transport Accident Report

Mottingham, Southern Railway, March 19, 1946

Colonel A. C. Trench, C.I.E., inquired into the collision which occurred at 10.8 p.m. on March 19, 1946, at Mottingham, Southern Railway, when the 9.40 p.m. 8-car electric train, Charing Cross to Dartford, running under clear signals at about 25 m.p.h., collided with the tender of 0-6-0 goods engine No. 1589, standing at a trailing connection at the London end of the station, awaiting admission to some sidings. The motorman of the electric train was killed and 13 passengers suffered minor injuries, two being detained in hospital. The driver and fireman of the light engine and a guard travelling on it suffered from shock. It was a dark, but clear night, with dry rail. Walker's block telegraph is in operation, but no breach of block working occurred. The signalman was authorised to accept the electric train with the light engine standing where it was, as this was beyond the clearance point applying in clear weather, which is the signal box itself, 193 yd. in advance of the down home signal.

COURSE OF EVENTS

An up goods train arrived at the up advanced starting signal at 9.50 p.m., and the light engine stopped on the down line four minutes later, when it whistled and was heard by the signalman. It was due to take the 10.25 p.m. down goods away from Mottingham. The up train was accordingly dealt with first, and 25 wagons were propelled into the sidings, after which the engine went forward with the remainder towards Lee Junction at 10.5 p.m.

The signalman had given "out of section" when the light engine stopped, as he was authorised to do, and had placed a collar on his up home lever when the goods train stopped. He actually took up a second collar to place on the down home lever, but was called to the telephone to speak to Control and unfortunately put

it down again. About 9.58 p.m. the electric train was offered out not accepted, and then Lee Junction asked whether "out of section" had been given for the light engine, no time having been booked there for this. The signalman gave the required information, stating that the engine was still waiting and that the movement of the up goods, which was within the authorised clearance, prevented him from accepting the electric train, which Lee Junction had to check at both home and starting signals. "Line clear," however, was received for it in time to prevent its having to stop at the latter. About this time the signalman had another telephone call from the junction, to which he replied, and, forgetting the light engine, offered the electric train to New Eltham and cleared all signals for it.

The electric train approached at about 40 m.p.h. The usual light brake application was made at the home signal, and then the motorman evidently saw the light engine at short range, as he made a full brake application which the guard felt just before the collision. There was evidence that the tail lamp was alight, but curvature would restrict the motorman's view and the station lights make it less conspicuous.

The light engine driver said he whistled on coming to a stand, and knew he would have to wait until the up goods had finished shunting. At about 10.5 p.m. his guard, who was on the footplate, noticed the starting signal had been cleared and told him to run forward, but although he released his brakes he thought he had no time to get into forward gear, and he and the fireman left the engine. The guard took a red lamp and went to run back, but was unsuccessful in warning the motorman.

The signalman frankly admitted his failure in forgetting the light engine. The

last two or three vehicles of the up goods train would have obstructed his view of its tail lamp, but the engine itself must have been visible at such short range, especially between lighted platforms. His telephone conversation with Lee Junction makes it clear that some minutes after the engine had arrived he was fully aware of its presence. It may be assumed that it was the unlucky coincidence of one, or possibly two, telephone calls about the moment when he accepted the electric train which made him forget the engine, a mistake he would not have made had he applied a lever collar. He had been at Mottingham for eight years and has a good record.

The light engine driver failed to carry out Rule 55 and send his fireman to the signal box. He was standing for over 10 min., and excused himself by saying he did not wish to send a young and inexperienced man across live rails in the dark. He had a hand lamp, the platform lamps adjacent were alight, and there were only two live rails to cross in the 6 ft. way. If he had really hesitated for that reason, he could have asked the guard on the footplate to go and at least have whistled again from time to time, particularly when he saw the up goods train start away. He had whistled on arrival, but did not do so again until the guard told him the down signals had been cleared. His failure to carry out the rule was a material contributory factor to the accident, and Colonel Trench considers also that the guard cannot be excused from responsibility for failing to remind the driver of the need of action under the rule. Both men have good records. No blame is placed on the fireman.

No recommendation is made. "It is clear," says the report, "that a track circuit, occupation of which locked the signals in rear, would have prevented the collision, but conditions at this point are not difficult, and there are many places where such protection is more important."

Financial and Operating Statistics of Railway Companies in Ireland

(Concluded from page 10)

the G.S.R. is about 3s. 8½d., or about 80 per cent. more than 2s. 0½d., the amount for the G.N.R.

The total tonnage of all freight on the G.S.R. in 1944 was the highest in any year. Apart from livestock the volume of the total rail-borne goods traffic on the G.S.R. shows an increase for 1944 of 0.77 million tons, or almost 33 per cent. over that for 1938, while the average annual number of livestock carried during 1938-44 was 1.44 million, compared with the averages of 2.46 and 1.56 millions for 1925-31 and 1932-37 respectively. There were increases in tonnage freights in 1944 over 1938 in merchandise and in other minerals, especially in the latter, in which the increase was over 180 per cent., due chiefly to the carriage of much larger quantities of sugar beet and turf, which amounted to 0.47 and 0.49 millions respectively in the year 1944.

The total ton-mileage figures of the G.S.R. for 1944 show an increase of 49 per cent. on those of 1938, while the corresponding increase for the G.N.R. is 121 per cent. on a much lower initial figure. In the case of the G.S.R., the aggregate of 286 million ton-miles in 1944 is much higher than in any year before the recent world war, and is largely accounted for by

the large increase in other minerals, mainly sugar beet and turf, the latter being conveyed fairly long distances to places like Dublin; to the relatively great increase under the heading, coal, etc., due in some measure to the opening up and development of the Irish mines during the emergency period; and also to the increase in merchandise.

All these items were influenced, so far as rail carriage is concerned, by the great reduction in private and public road haulage resulting from the scarcity of petrol supplies. The ton-mileage of livestock has altered but little; in fact, it has decreased, consequent on lower exports.

The ton-mileage of the G.N.R. was similarly affected by the removal of many private and public motor lorries from the roads, and showed a distinct upward movement during this period. This was accounted for by the increased traffic in general merchandise, due in no small measure to war work and the consequent improved economic conditions in the northern part of the country, and to the exceptionally high percentage increase in other minerals.

The ton-mileage for the years 1938 and 1944, points to a relatively small increase for livestock and coal, etc. In spite of the large increases in ton-miles of merchandise on the two systems, the percentages of the total freight for this item in 1944 for the G.S.R. and G.N.R. are lower than those for 1938, namely, 48 per cent. and 64 per

cent. respectively, compared with 62 and 71 per cent. during the latter twelve months. As an index of efficiency, wagon miles, which are not furnished in the returns to stockholders, but are included in the Government statistics relating to the operation of the railways, are useful. In 1944, the loaded wagon mileage of the G.S.R. was 61.4 million miles or 71.0 per cent. of the total wagon miles, while the corresponding figures for 1938 were 55.4 million, or 69.4 per cent. of the total. Similar statistics of loaded wagon mileage of the G.N.R. for 1944 were 25.6 million miles, or 72.4 per cent. of the total wagon miles, and for 1938 the corresponding figures were 16.0 million miles, or 70.1 per cent. of the total wagon mileage.

DISPOSAL OF GOVERNMENT SURPLUS MACHINE TOOLS.—A further "on-site" sale of surplus machine tools will be held by the Ministry of Supply at the Castle Bromwich Works, near Birmingham, of Vickers Armstrong Limited, from July 17 to 23. There will be 600 machine tools available, including riveters, capstan lathes, millers, grinders, drillers, and miscellaneous types. Unsold machines will be on view daily from 10 a.m. to 4 p.m. (except Saturdays and Sundays) from July 24 to 30, for the purpose of competitive tendering. Prospective purchasers should visit the site between these dates to view the residual machines and obtain tender forms and guidance regarding procedure.

Railway Chairmen's Letters to Stockholders

Mandate sought to oppose nationalisation

The Chairmen of the four main-line railway companies have sent a letter to every railway stockholder, explaining the conviction of their boards that the advantages of maintaining the British railways under their present ownership and management outweigh any likely to be obtained in any form of State ownership. A post-card is attached, on which stockholders are asked to indicate whether they favour the taking of all possible steps by the boards to oppose any nationalisation proposals affecting the railways. The letter from the Chairmen is in the following terms:—

"The stockholders will be aware that in November last the Government announced that it was its intention during the life of the present Parliament to introduce measures designed to bring transport services essential to the economic well-being of the nation under State ownership and control.

"In view of the probability of the Government introducing into Parliament in the early stages of next session a Bill for the nationalisation of the railways and long-distance road haulage services, your board considers it essential to obtain, at once, the views of the stockholders.

"The many tributes which have been paid to the efficiency with which the railways have met the needs of the community under both peace and wartime conditions make it obvious that the present railway administration has built up an organisation which can deal efficiently with the problems of the future and there is no evidence that nationalisation will give better service to the community. A fundamental change of this character, in the opinion of your board, will have a disturbing effect on trade and industry throughout the country and on the economic life of the community in general."

The letter then reproduces the resolutions which were passed after the formal business of the ordinary general meetings of the four railway companies early this year, of which the following, at the L.N.E.R. meeting, is typical:—

"That this meeting of stockholders of the London & North Eastern Railway Company is in full agreement with the opinion of the board that the nationalisation of the transport industry is not in the best interests of the country as a whole. Should, however, nationalisation be enforced on the proprietors, then, in the opinion of this meeting, the only just basis of compensation is the capital value of their undertaking as an essential national asset."

The letter continues:—"The boards of the main-line companies will take all possible steps to protect the interests of the stockholders and all concerned. They are themselves convinced that the advantages of maintaining the British railways under their present ownership and management far outweigh any likely to be obtained under any form of State ownership. The matter is one of vital importance and, in all the circumstances, your board feels it must have a clear mandate from its stockholders in support of its views."

Extracts from the speeches of each of the Chairmen at the last annual general meetings of the companies, dealing with nationalisation, are also enclosed with the letter, and a leaflet either from the L.N.E.R. Stockholders Association or the

British Railway Stockholders Union, setting out the views of those bodies. The British Railway Stockholders Union letter to stockholders states:—

"The coming twelve months will represent a crisis in British railways. The Government has announced its intention to introduce a nationalisation scheme and we have no indication of the terms under which you may be dispossessed of your property."

"The immediate threat is that, under nationalisation, the grave injustices suffered by stockholders in recent years will be perpetuated. The compensation offered by a Socialist Government may well leave great blocks of equity shares either dividendless or with returns much below those promised under the Railways Act of 1921."

"The Railways Act of 1921 is the stockholders' charter, and an immediate and imperative need is an all-out effort to establish its validity as part of a bargain publicly made between a British Government and those who put their savings into the largest and most widely-operating public utility in the country. This union has been working steadily for fifteen years to protect the interests of railway stockholders. Its Executive confidently claims your co-operation in this crisis. Thus the boards of directors will be assured of full support in the efforts they are making, not only to protect the interests of their shareholders, but to save the British public and industry from what promises to be the disaster of a nationalised transport system."

Institute of Transport Luncheon

Building Fund Appeal

At an informal luncheon of the Institute of Transport to the technical press held at the Connaught Rooms, London, on Monday, the President, Sir Frederick Handley Page, outlined the new programme for the Institute.

In an introductory speech, Mr. John P. Taylor, Editor of *Shipbuilding and Shipping Record*, referred to the work of the Institute since its foundation and asked the President to elaborate the scheme.

Sir Frederick Handley Page, in reply, said that the Institute had for long felt that it should have a building of its own. It had a membership of over 6,500 and a record of good service including the provision of the main transport literature during the past 26 years. For the new house of the Institute they wanted at least £100,000, and generous promises of support to date amounted to some £40,000. In addition, they had in mind provision of better facilities for the branch organisations. In the new era of development a high degree of skill and operation was as important as getting the best out of the raw material of the industry.

Past-Presidents like Sir William Wood and Mr. Robert Kelso had put in a tremendous amount of spade work, and the Institute of Transport in the development of its educational and research work was seeking to encourage in its members a real professional pride in their calling, for the administration of transport was a professional business calling for a high degree of skill and education. The Government was going to subsidise the Institute of

The leaflet from the L.N.E.R. Stockholders Association states:—

"The council of this association is most strongly opposed to the nationalisation of the railways, which it considers to be against the best interests of the country as a whole. Although the Government has not yet announced its detailed plans, or the objects which it hopes to achieve, or the reasons which have actuated its decisions, it is impossible to conceive that the nationalisation of the railways can be of advantage to railway stockholders who have already been grossly penalised by the operation for over six-and-a-half years of Government control, which has been continued by Order in Council, without reference to them, and may ultimately be used as a stepping-stone to the State acquisition of their undertakings on terms most favourable to the purchaser. In this event, the injustice of the wartime control agreement, imposed under duress, will be perpetuated."

"Nationalisation of inland transport will not provide a better or cheaper service for the public and it will not improve the position of the salaried and wages staffs employed by the transport undertakings. On the contrary, nationalisation may well mean that transport of every kind will be more expensive and less efficient, encumbered with all sorts of unnecessary regulations and restrictions and hampered by more officials and Whitehall centralisation."

"During the 1914-18 war, the railways of the United States of America were Government controlled and cost that country about two million dollars per day in subsidies. In the last war, private enterprise ran the American railways and contributed about four million dollars a day to the National Exchequer."

Management to the extent of £150,000.

Among those present were:—

The Aeroplane (Mr. T. James); Lord Ashfield (Past-President); Messrs. V. M. Barrington-Ward (a Vice-President); E. C. Bowyer; C. T. Brunner; Major F. J. Chapple; *The Commercial Motor* (Mr. G. Mackenzie Junner); Mr. F. W. Crews (Secretary); *The Daily Telegraph*; *The Dock & Harbour Authority* (Mr. K. R. Doggett); Mr. H. T. Duffield; Exchange Telegraph; *Fairplay* (Mr. Gordon H. Robinson); *Flight* (Mr. C. M. Poulsen); Messrs. W. S. Graft-Baker; A. G. Griffiths; L. W. Gupwell (a Vice-President); Sir Frederick Handley Page (President); Messrs. S. G. Hearn; Tudor Jenkins; *The Journal of Commerce* (Mr. H. Cuthbert); Messrs. R. Kelso (Past-President); S. Kennedy; *Lloyd's List* (Mr. G. Bryant); *The Locomotive* (Mr. A. R. Bell); *The Manchester Guardian*; Mr. M. G. J. McHaffie; *Modern Transport* (Mr. D. R. Lamb); Mr. W. Vane Morland; *Motor Transport* (Mr. C. F. Haywood); Mr. J. Ness; Sir Hazelton Nicholl; Mr. J. S. Nicholl (Past-President); *Passenger Transport Journal* (Mr. H. J. Ferguson); *The P.L.A. Monthly* (Mr. E. K. Holmes); Press Association; *The Railway Gazette* (Mr. J. A. Kay); Messrs. T. A. Reed; T. W. Royle (a Vice-President); C. J. Selway (Honorary Treasurer); *Shipbuilding & Shipping Record* (Mr. John P. Taylor); *The Shipping World* (Mr. R. Kendall); Mr. E. S. Shrapnell-Smith; Major R. A. B. Smith; *The Syren & Shipping Illustrated* (Mr. Ronald Pearse); Mr. Gilbert S. Szlumper (Past-President); *The Times*; Mr. F. W. Tipton; *Transport World* (Mr. James Finlay); Messrs. H. C. Tree; J. S. Wills; Sir William Wood (Past-President); *The World's Carriers* (Mr. Walter G. Sharp); Mr. H. E. Wortham; Mr. W. Donaldson Wright.

Parliamentary Notes

Increases in Transport Charges

Major J. A. Boyd-Carpenter (Kingston-upon-Thames—C.), in the House of Commons on June 26, moved that the Railway-Owned Harbours, Docks & Piers (Increase of Charges) Order, 1946, dated June 15, 1946, be annulled.

In the course of his speech Major Boyd-Carpenter said that goods increases of the present kind constituted an element in the costs of almost every form of industrial production, and that the increases in passenger fares would have repercussions on the wages policy of the Government, although he was not himself clear as to what that wages policy was. In considerable sections of the community the cost of season tickets meant a substantial proportion of their expenditure, and increases of that kind might affect the whole balance of the wages question. He understood that when the Minister of Transport had made his statement to the House on May 29, his argument had been that the course taken was because of the loss of revenue through the stopping of wartime traffic. It followed from that argument that the action the Minister had taken for increasing the fares was only the first action, and was to be followed by a reference to the permanent members of the old Railway Rates Tribunal sitting as a type of consultative committee. It was possible that the Railway Rates Tribunal would recommend that the rates be not increased; it might take the view that to increase the charges was not the best way to remedy a falling-off in traffic. If that was so, would the Minister say whether he was prepared to reverse his action?

Had the Minister taken the advice of, or consulted, the railway companies? The basis of the Minister's action had been the falling-off in wartime traffic. Had he taken the advice of other departments concerned with the economics of trade as to the likelihood of wartime traffic being replaced by an increase in the normal peacetime and industrial traffic? If a replacement could take place in a fairly short time, the rather panicky action of the Minister would have been inadvisable; but if there was no chance of a recovery in normal peacetime traffic, the fact cast a rather strange light on the reassurances recently given by the Minister's colleagues about the prospect of early economic recovery.

The date selected, July 1, was the period at which the holiday season could be said to open. There was a considerable number of persons hoping to have their first decent holidays for seven years, many of whom, as a result of the Minister's decision, were faced with a substantial increase in expenses.

Major C. S. Taylor (Eastbourne—C.) seconded the motion. He said the Chancellor of the Exchequer in recent speeches had warned business men and companies against increasing dividends because he believed that would lead to inflation. He submitted that the present Orders would lead to inflation.

Mr. Alfred Barnes (Minister of Transport) said he welcomed an opportunity of ventilating this matter on the floor of the House. As concerned the Railway Rates Tribunal, it had been disbanded in the early stages of the war because wartime conditions had made its duties more or less irrelevant, but the services of the permanent members had been retained to be at the disposal of the Minister for consulta-

tion, and for the early increase of 16½ per cent. their services had been invoked. The railway agreement governed the whole of this matter. He had not heard the slightest hint in any speech that they should dishonour an agreement the House had authorised, especially as during the war, if the railway companies had been free to exploit the position, which they could have done in the circumstances prevailing, the results to them would have been much better than they actually were.

Proceeding, Mr. Barnes said the financial advantage to the State, represented in the surplus which the Chancellor acquired over and above the net revenue for the rent paid to the railways, was largely on account of Government traffic. In 1944 the volume of Government traffic had amounted to £123 million. In 1945, especially in the last six months, the traffic had been dropping very rapidly, and in 1945 it was £102 million. He was confronted with the problem that there would be a rapid changeover to industry, and with it the responsibility of ascertaining, as quickly as possible, what were the trends of traffic receipts in 1946. The whole of the information on which he had based his decision was obtained from the railway companies and the Railway Executive Committee.

Major Boyd-Carpenter: I do not know whether the Minister is suggesting that the proposal also came from the railway companies?

Mr. Barnes: No, I accept that responsibility, because I consider it is my responsibility to carry a decision of that kind. It was the railway companies which were responsible for furnishing me with the data on which I based my decision. It was quite clear this year that there would be a heavy deficit on the railway account, and Members must make up their minds whether that should be borne by the taxpayers, or by those people who used the railways.

The problem arose, he continued, because they had to meet, in this, as in previous years, the rent fixed at £43 millions which was the payment made to the railways by the Government and with which they repaid their interest charges. To that extent they had to make up that deficit, and as that was roughly the estimated sum, it could be argued that the increase in fares was for the purpose of providing the interest charge on the capital. However, those capital charges would have to be met, whether the railways were in the hands of the State or of individual shareholders. It was merely a question of meeting the normal, economic legitimate charges which rested on railway transport.

Mr. Barnes went on to indicate the relative position of transport charges as compared with similar basic services which affected the general level of prices. For instance, he said, the price of cotton goods had advanced 98.2 per cent.; wool, 80.8 per cent.; building materials, 61.6 per cent.; and coal, 97.9 per cent. The wholesale price of milk had increased by 50 per cent. General cargo liner charges for freight had increased by 100 per cent., and tramps were still higher.

He asked Members to look at some of the costs the railways had to meet for their ordinary running. Steel rails had increased 61 per cent., sleepers by 206 per cent., lubricating oil by 157 per cent., and clothing by 126 per cent.

Two years after the 1914-18 war railway charges had increased by approxi-

mately 100 per cent. over the 1914 cost. Later, there had been a reduction to approximately 60 per cent. and the figure had been stabilised, in 1928, at 60 per cent. above 1914. In this case transport charges had not moved in any way above the level of the general price movement within the community. The increase he was putting on at the highest level, with regard to passenger and freights, brought the figure up to 38½ per cent. over the 1939 cost. As concerned coal, general merchandise, workmen's fares and season tickets, the rates varied by 8½ per cent. up to 15 per cent. His purpose was to bring the rates in that group to a level of 25 per cent. over 1939 cost. If every other commodity and service in the country had an increase of only 33½ or 25 per cent. they would be in a much happier position.

The problems of reduced or cheaper fares, and excursion fares, were now being discussed, and he was confident that within a short time some adjustments and facilities would be available.

Mr. A. T. Lennox-Boyd (Mid. Bedford—C.): Why did not the Minister consult the Railway Rates Tribunal before coming to this decision? What will he do if the Tribunal says that, in its opinion, other methods should be tried to bridge the gap?

Mr. Barnes: The longer this was left, the greater the deficiency that would have to be met; and, in consultation with the Chancellor, we made a clear division of the year's loss by which I would recoup the loss in the second half of the year—namely, from July 1—and the Chancellor and the Treasury would meet the loss incurred on the first half of the year. The longer I had left that, the more unequally that division of the first year's loss, would have affected the balance. With regard to the Railway Rates Tribunal, I put on the minimum increase, and the Tribunal will make a more thorough examination of the problem. Further, I considered that now we were reaching this decision it was only right that the Railway Rates Tribunal should be re-established so that organisations and bodies representing public opinion should have the opportunity of expressing their views on matters of this description.

Mr. Leslie Hale (Oldham—Lab.) said the House had not had any information on the point whether the increase was necessary. The last figures of railway receipts and expenditure had been given in a White Paper in December, 1945. That showed that for the year 1945 the railway pool made a gross overall profit of £62,500,000. Of that figure, £43,000,000 went to the railway companies, and the remainder to the Exchequer. In the first four months of this year there had been a diminution in passenger receipts of only 2 per cent. He prophesied that there was a great unsatisfied demand for passenger transport coming in the next few months. It was true that there was a substantial diminution in merchandise receipts, which came down by 23.2 per cent. We were in the transitional stage from war to peace, and the great volume of wartime traffic had gone. With peacetime traffic in operation to the full there was no reason to anticipate that under a Socialist Government the volume of merchandise would not increase.

Sir John Mellor (Sutton Coldfield—C.) said that during the war the Government had made a profit of £195,000,000 out of the railways over and above the annual rental of £43 million paid to the companies. He thought that that very large fund should be drawn on for, say, this year, to give the Minister rather more time to consider the matter with the Railway Rates Tribunal.

The motion was negatived.

Questions in Parliament

Derby Station, L.M.S.R.

Mr. A. J. Champion (Derby, Southern—Lab.) on July 1 asked the Minister of Transport if he would take steps to secure an early and drastic alteration to the Derby, L.M.S.R. Station, so as to provide reasonably sanitary conditions in the lavatories, to clean up the refreshment rooms and, generally, to modernise that station.

Mr. Alfred Barnes: I am informed that plans for the modernisation of Derby L.M.S.R. Station, including the refreshment room and lavatories, have been prepared. Meanwhile, the two railbars have been redecorated during the last few weeks, the refreshment room on platform 1 is now being redecorated and the other refreshment room will be dealt with next. The lavatories are old, but pending reconstruction they are kept as clean and tidy as possible.

Lt.-Colonel Sir Thomas Moore (Ayr Burghs—C.): Is it not a fact that the only way in which one can discriminate between the lavatories and the restaurants in any station in this country is by the smell?

Mr. Barnes: I would point out to Sir Thomas Moore that if this is so, it has been during the years that the railways have been under private enterprise.

Railway Excursion Tickets

Mr. P. L. E. Shurmer (Birmingham, Sparkbrook—Lab.) on June 24 asked the Minister of Transport whether, in view of the fact that the present increase in rail fares would cause hardship to families travelling on holidays, he was prepared to consider the issue of cheap period excursion tickets to holiday resorts.

Mr. Thomas Braddock (Mitcham—Lab.) also asked the Minister of Transport if he would make provision for the re-introduction of cheap day return tickets and cheap week-end return tickets which were ended in 1942, and introduce excursion fares, so that the general community could have the same facilities as motorcar owners to take advantage of the sea coast and countryside.

Mr. Alfred Barnes, in a written answer,

stated: I expect to be able to make a statement on this subject in the near future. My present advice, however, is that during the present summer the railway companies would be unable to cope with the additional traffic which the re-introduction of cheap fares would induce.

Notes and News

Vacancies on the New Zealand Government Railways.—An assistant engineer (signals) and an assistant engineer (electrical) are required for work in the signal and electrical branch of the New Zealand Government Railways. See Official Notices on page 31.

Hadfields Limited and Malaya.—Hadfields Limited states that, in accordance with its policy of supporting overseas representatives with expert technical assistance, it has arranged with Paterson Simons Limited, its agent in the Malayan Peninsula, for Mr. Patrick R. Brogan to join the latter's staff.

Signal and Telegraph Inspector.—A signal and telegraph inspector is required by the Sudan Railways. Candidates should have had experience in the installation and maintenance of mechanical signalling, telegraph, tablet and token and telephone instruments (including train control apparatus), and be able to prepare signal interlocking diagrams and charts. See Official Notices on page 31.

First G.W.R. Oil-Burning Passenger Locomotive.—The G.W.R. has just completed the conversion of the first of its passenger locomotives from coal to oil burning. The locomotive is No. 5955, *Garth Hall*, which is now undergoing trials at Swindon Works. When these are completed the engine will be used on fast passenger trains between London and Bristol. The company already has converted experimentally 18 heavy 2-8-0 goods locomotives of Class "2800" from coal to oil burning owing to the acute shortage of coal. Of these, eleven are now in service in South Wales, hauling coal and freight trains for runs up to 250 miles

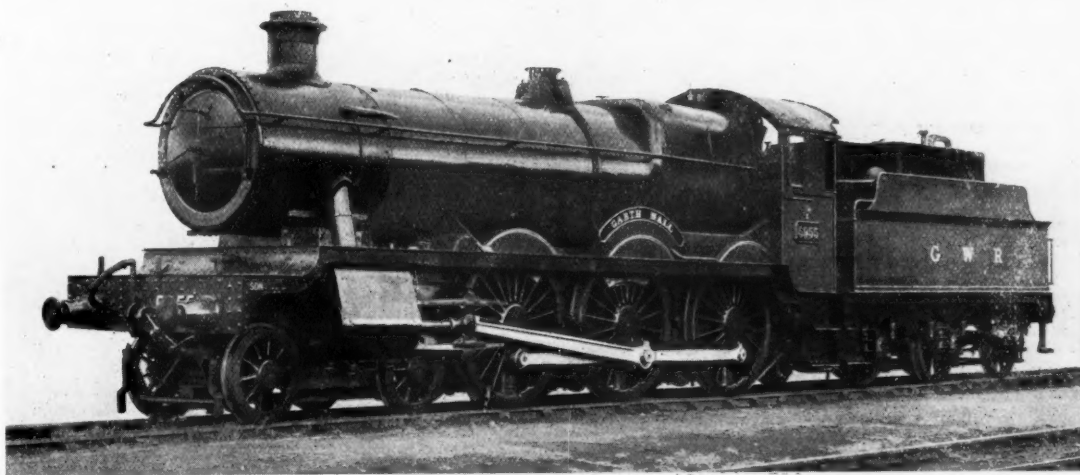
between refuelling points at Llanelly and Severn Tunnel Junction. The experiment, which has so far been satisfactory, is being carried out in conjunction with the Anglo-Iranian Oil Co. Ltd. An illustrated description of the goods engines appeared in our January 18 issue.

Southampton Docks (Increase of Charges).—Notice is given in *The London Gazette* of June 25 that from July 1, 1946, in addition to the increases authorised from the same date, in accordance with the Railway-Owned Harbours, Docks & Piers (Increase of Charges) Order, 1946, certain rates and charges have been increased by 12½ per cent. in pursuance of the Southern Railway, Southampton Docks (Increase of Charges) Order, 1946.

Southern Railway Striking of Balances.—The directors of the Southern Railway Company have fixed today (July 5) as the date for striking the balances for dividend on the guaranteed preference, preference, and preferred ordinary stocks in respect of the half-year ended June 30, 1946. The dividend which may be declared on such stocks will be payable on August 16, 1946, to the persons whose names are registered in the books of the company at the close of business on the date so fixed.

L.N.E.R. Trains to Moorgate.—With the introduction of the summer timetable on May 6, L.N.E.R. London suburban trains to Moorgate were restored. This service from the Great Northern Section was withdrawn when the emergency service was introduced after the outbreak of war on September 10, 1939. It was afterwards reinstated on a modified scale on January 1, 1940, and continued in operation, except for short periods during the months of October, November, and December, 1940, when the lines were blocked by bomb damage, until January 4, 1941, when the service was withdrawn after prior public notice stating that these trains would be discontinued on and from Monday, January 6. Passenger services to and from Aldersgate were restored on Monday, October 1, 1945, and extended to Moorgate on Monday, May 6, 1946. During the period while trains terminated for passenger traffic at

G.W.R. Oil-Burning Locomotive



G.W.R. "Hall" class locomotive No. 5955, "Garth Hall," converted for oil-burning preparatory to passenger service on the London-Bristol main line (see paragraph on this page)

Aldersgate, they were worked forward to and from Moorgate as empty coaches and a waiting locomotive was provided at that point as now.

Cost-of-Living Index.—At June 1 the official cost-of-living index figure was 103 points above the level of July, 1914, compared with 104 points a month earlier. At June 1, 1939, it was 53 points above July, 1914.

L.M.S.R. Striking of Balance.—Balance of the four per cent. guaranteed, four per cent. preference, four per cent. preference (1923), and ordinary stocks of the London Midland & Scottish Railway Company will be struck at the close of business on July 9.

Senior Locomotive Foreman Required.—A senior locomotive foreman is required by a British railway in Africa to take charge, under the chief mechanical engineer, of a small locomotive general repairs workshop. See Official Notices on page 31.

Derailment at Wootton Bassett, G.W.R.—On June 27 the 11.50 p.m. Paddington to Carmarthen goods train was derailed at Wootton Bassett Junction. The engine fell on its side and 23 wagons were telescoped. Up and down lines to Bristol and South Wales were blocked. The guard was slightly injured, and the driver and fireman suffered shock.

Pig Iron and Steel Production in May.—The table below shows pig iron and steel production in the United Kingdom in May, 1946, with previous figures for comparison:—

	Pig iron		Steel ingots and castings	
	Weekly average	Annual rate (000's omitted)	Weekly average	Annual rate (000's omitted)
1946—				
May	151,200	7,860	261,900	13,619
April	148,700	7,732	252,100	13,111
1st quarter	145,500	7,566	242,600	12,617
1945—				
May	128,200	6,668	210,800	10,962
April	137,600	7,154	236,600	12,302
1st quarter	134,500	6,992	233,200	12,126
1938—				
Year	130,000	6,761	200,000	10,398

Increase of Charges on Railway-Owned Canals.—Pursuant to the Railway-Owned Canals (Increase of Charges) Order, 1946, the tolls, dues, charges in respect of wharfage or craning, tugging charges and empty boat charges, in force on March 25, 1941, in respect of the undermentioned canals and navigations, have been increased by 25 per cent. from July 1, 1946, subject to the following fractions rule: If any increased toll, due, or charge includes a fraction of 1d. the fraction, if less than $\frac{1}{2}$ d., shall not be charged, otherwise it shall be charged as 1d. The increased tolls, dues, and charges, as above, applied on and from July 1, 1946, are *in lieu* of those made on and from May 1, 1941, pursuant to the Railway-Owned Canals (Increase of Charges) Order, 1941. The canals and navigations concerned are:—

Ashby-de-la-Zouch Canal, Cromford Canal, Lancaster (North End) Canal, Manchester Bolton & Bury Canal, St. Helens Canal, Trent & Mersey Navigation, Shropshire Union Canal, Forth & Clyde Canal, Monkland Canal, Ashton Canal, Boro-bridge & Ripon Canal, Chesterfield Canal, Foss Dyke Navigation, Macclesfield Canal, Peak Forest Canal, Witham Navigation, Edinburgh & Glasgow Union Canal, Brecon & Abergavenny Canal, Monmouthshire Canal, River Kennet Navigation, Kennet & Avon Canal, River Avon Navigation, Bridgewater & Taunton Canal, River Tone Navigation, Grand Western

Canal, Stourbridge Extension Canal, Stratford-upon-Avon Canal, Swansea Canal (including the Trewyddfa Canal), Thames & Medway Canal, Kensington Canal.

Agent for Peter Brotherhood Limited.—Subsequent to the retirement of Mr. Robert Henderson, who has managed its Glasgow office for many years, Peter Brotherhood Limited has appointed Henderson Agencies (1945) Limited, 26 Bothwell Street, Glasgow, C.2, to be its agent for the whole of Scotland and Northern Ireland.

Buffer Stop Collision at Waterloo.—The 10.35 a.m. Southern Railway Exeter—Waterloo passenger train ran into the buffer stops at No. 14 platform, Waterloo Station, on June 29. Seventeen passengers were treated at St. Thomas's Hospital for minor injuries and shock, but were able to return home later. The station first aid post treated 33 other passengers who were slightly hurt, mainly by falls when the impact occurred.

Ribble Motor Services Limited.—Total revenue for the year ended March 31, 1946, amounted to £2,156,909, and after deducting all expenses, and adding £78,466 brought in from the previous year, the total of £176,106 is available. A dividend of 6½ per cent. on the cumulative preference shares (already paid) takes £6,500, and the directors recommend a final dividend of 6 per cent. on the ordinary shares (making 10 per cent. for the year) plus a bonus of 5 per cent., leaving £73,006 to be carried forward.

Visit of French Industrialists.—Representatives of the Commission Générale d'Organisation Scientifique (C.E.G.O.S.), of France, visiting this country were entertained recently by members of the Council of the British Engineers' Association. The Director of the B.E.A., Mr. A. W. Berry, welcomed the visitors in an address in French in which he stated that, despite present difficulties, Britain was re-establishing her industrial capacity and proposed herself to fill the gap corresponding to the former German industrial imports to France. M. Detouef, President of C.E.G.O.S., replied. The C.E.G.O.S. in France fulfils a function similar to that of the Management Research Groups in this country. Among the matters studied are mechanisation of office work, workshop accounting, public relations, and personnel administration.

Future of the Tourist Industry.—Sir Hartley Shawcross, the Attorney-General, in the course of addressing the annual meeting of the Travel Association on June 27, stressed the need for developing the tourist industry in this country, as the money it would bring was a form of export we could not neglect. In Canada before the war the tourist industry had produced revenue equal to one-quarter of the value of the export trade. Foreign tourists to Great Britain probably spent £30,000,000 a year there; but there was no reason why, properly developed, our tourist industry should not eventually bring in at least £100,000,000 a year. He believed we needed a joint organisation, with the Travel Association as an important section, for developing and improving our tourist, holiday, and catering industries. The association had done most important work, but its funds had been limited and it had not enjoyed official status or support. Those matters were under consideration by the Government. The interests and re-

sponsibilities of the various Government departments were being co-ordinated by the Board of Trade. That did not mean Government control; there was no question of the Government nationalising the tourist industry or of any fettering Government control being established in respect of it.

Additional Southern Railway Service to Paris and Switzerland.—On Mondays, Wednesdays and Fridays the 9 a.m. Ostend (via Folkestone) boat express from Victoria includes first and second class carriages for

British and Irish Railway Stocks and Shares

Stocks	Highest 1945	Lowest 1945	Prices	
			July 2, 1946	Rise Fall
G.W.R.				
Cons. Ord.	60½	47½	56½	—
5% Con. Pref.	124½	104½	117	—
5% Red. Pref. (1950) ..	107½	101½	104½	—
5% Rt. Charge	137½	120	128½xd	— 1
5% Cons. Guar.	135½	117	125½	— 1
4% Deb.	118	106	116xd	— 1
4½% Deb.	119½	108	116½xd	— 1
4½% Deb.	124½	111½	120½x	—
5% Deb.	138	124	131½xd	— 2
2½% Deb.	83	74½	86½xd	— 1
L.M.S.R.				
Ord.	33	23½	27½	—
4% Pref. (1923)	65	50	55	—
4% Pref.	80½	69½	78½	— 1
5% Red. Pref. (1955) ..	106½	99½	102½	—
4% Guar.	106½	97	100	— ½
4% Deb.	110½	102	108	—
5% Red. Deb. (1952) ..	110½	103½	106½	—
L.N.E.R.				
5% Pref. Ord.	8½	5½	5½	— ½
Def. Ord.	4½	2½	2½	—
4% First Pref.	62½	49½	54	— 1
4% Second Pref.	33½	24½	26½	— ½
5% Red. Pref. (1955) ..	103	96	100	—
4% First Guar.	104½	95	99½	— 1
4% Second Guar.	97	89½	93½	— ½
3% Deb.	91½	82½	93	—
4% Deb.	109½	101	108	—
5% Red. Deb. (1947) ..	103½	100	100	—
4½% Sinking Fund Red. Deb.	106½	103	104½	—
SOUTHERN				
Pref. Ord.	79½	63	73	—
Def. Ord.	27	20½	20	—
5% Pref.	124½	104	115½	— ½
5% Red. Pref. (1964) ..	117	107	110½	—
5% Guar. Pref.	135½	117	125½	—
5% Red. Guar. Pref. (1957)	117	106½	112½	—
4% Deb.	117	104½	115	—
5% Deb.	137	124	131½	—
5% Red. Deb. (1962- 67)	112	104½	108½	—
4% Red. Deb. (1970- 80)	113½	104	109½	—
FORTH BRIDGE				
4% Deb.	106	103	106	—
4% Guar.	106	101	103	—
L.P.T.B.				
4½ "A"	125	117	124½	—
5% "A"	135	127	133½	—
3% Guar. (1967-72) ..	100	97½	104	—
5% "B"	125½	115	120½	—
"C"	70	58	60	—
MERSEY				
Ord.	37	31½	30½	—
3% Perp. Pref.	72½	68½	72	—
4% Perp. Deb.	104½	104	105	—
3% Perp. Deb.	84	78½	82½	—
IRELAND*				
BELFAST & C.D.				
Ord.	8½	6	7½	—
G. NORTHERN				
Ord.	34	24½	41	— 1
Pref.	52½	42½	61½	— ½
Guar.	80	68	91½	—
Deb.	97½	87½	101½	—
IRISH TRANSPORT				
Common	—	—	18/6	— 3d.
3% Deb.	—	—	102	—

* Latest available quotation

OFFICIAL NOTICES

New Zealand Government Railways

APPLICATIONS are invited for the positions of—

- (a) Assistant Engineer (Signals) for signalling work in the Signal and Electrical Branch, and
- (b) Assistant Engineer (Electrical) for electrical work in the Signal and Electrical Branch.

Applicants must be Associate Members of the Institution of Electrical Engineers, and be between the ages of 25 and 35 years.

Salary for each position will be £740 per annum (New Zealand currency).

Further particulars may be obtained by July 20 from the High Commissioner for New Zealand, 415, Strand, London, W.C.2.

STATION DESIGN. A striking example of modern British practice at the important wayside station of Luton. Reprinted from *The Railway Gazette*, July 7, 1944. Price 1s. Post free 1s. 2d.

THE "PAGET" LOCOMOTIVE. Hitherto unpublished details of Sir Cecil Paget's heroic experiment. Eight single-acting cylinders with rotary valves. An application of the principles of the Willans central-valve engine to the steam locomotive. By James Clayton, M.B.E., M.I.Mech.E. Reprinted from *The Railway Gazette*, November 2, 1945. Price 2s. Post free 2s. 3d.

passengers travelling to Paris and Switzerland via Dover-Calais. This portion of the train, which runs to Dover Marine and conveys a first class Pullman car, connects with the 12.30 p.m. Dover-Calais steamer. The service began on July 1.

Re-opening of the Holborn-Aldwych Tube.—On July 1 the Holborn to Aldwych branch of the Piccadilly Line, L.P.T.B., was re-opened for traffic. The Aldwych branch, which was used by about a million passengers a year, was closed to traffic on September 1, 1940, and during the air raids 1,500 persons a night regularly used it as a shelter.

The Wantage Locomotive.—The old locomotive *Shannon*, which was bought by the G.W.R. from the Wantage Tramway Company to save her from being broken up, has been sent to Swindon Works for cleaning and overhaul before being placed on a G.W.R. station platform, probably in the district where she worked. We recorded the purchase, mainly through the interest of Mr. F. W. Hawksworth, Chief Mechanical Engineer, G.W.R., in our issue of May 17, page 555.

Increase of Dock Charges.—Pursuant to the Railway-Owned Harbours, Docks & Piers (Increase of Charges) Order, 1946, the Rates, Dues, and Other Charges (other than the charges mentioned below to which the Order does not apply) at the railway-owned harbours, docks and piers named in the Order have been increased from July 1, 1946, as follows:—

(1) Rates, dues and other charges on coasting liners when carrying mixed cargoes of merchandise and operating on regular scheduled services and on the cargoes of such liners, in force on August 31, 1939: by 15 per cent. (subject to fractions rule below).

(2) All other rates, dues and charges in force on August 31, 1939: by 40 per cent. (subject to fractions rule).

If any increased rate, due or other charge includes a fraction of a farthing, the fraction if less than half a farthing shall be dropped, or if the fraction amounts to half a farthing but is less than a farthing it shall be charged as a farthing.

The increased rates, dues and other charges applied on and from July 1, 1946, are in lieu of those made on and from November 1, 1940, pursuant to the Railway-Owned Harbours, Docks & Piers (In-

Sudan Government

SUDAN RAILWAYS require a Signal and Telegraph Inspector for service in the Sudan. Age 25-35 years. Candidates should have had workshop and outdoor experience in the installation and maintenance of mechanical signalling, telegraph, tablet and token and telephone instruments (including train control apparatus), and be able to prepare signal interlocking diagrams and charts.

The appointment would be on Provident Fund Contract and the starting rate in the following scale would be determined according to age, experience and qualifications:—£E 290-320-350-380-420-460-500-560-630-700-770 maximum, if efficiency bar not passed after reaching £E 560; if efficiency bar passed, scale extended to £E 920. (£1. = £1 0s. 6d.)

Cost-of-Living Allowance at the rate of 35 per cent. of pay, subject to a maximum of £E 15 per mensem. At present there is no Income Tax in the Sudan. Free passage and Outfit Allowance of £E 40 on starting rates up to certain limits. Strict medical examination.

Applications, giving full particulars of age, qualifications and experience should be sent to the Sudan Agent in London, Wellington House, Buckingham Gate, London, S.W.1, marking envelope "Signal Inspector."

crease of Charges) Order, 1940. Charges to which the new Order does not apply are: (a) Labour charges which have been varied since September 3, 1939, or which may be varied in consequence of alterations in the rates of wages; (b) any charges in respect of through traffic which have been increased or may be increased hereafter under the provisions of the Railways (Additional Charges) Order, 1940, or any Order modifying such Order.

Naming of Southern Railway "West Country" Class Locomotives.—A further five Southern Railway "West Country" class engines have been named in the West of England; the naming ceremonies took place at Axminster and Seaton on June 25; Exmouth and Budleigh Salterton on June 26; and at Sidmouth on June 27. The locomotives were named after the respective towns. The ceremonies were performed by chairmen and deputies of the Urban District Councils concerned, supported by members of the councils and other prominent persons. Among those present from the Southern Railway were:—

Messrs. E. A. W. Turbett, Assistant Chief Mechanical Engineer; C. Grasemann, Public Relations & Advertising Officer; E. S. Moore, Superintendent of Motive Power, Western Division; G. Bishop, Divisional Superintendent, Western Division; E. V. Brady, Assistant Divisional Engineer, Western Division; and K. R. Elson, Public Relations Assistant.

Thirteen of these engines have now been named, and each carries, in addition to the nameplate, the coat of arms either of the town or of the county in which the town is situated.

Art Experts to Advise London Transport.—Lord Ashfield, Chairman of the London Passenger Transport Board, has invited Dr. Herbert Read, Mr. William Pettigrew Gibson and Mr. Philip Bruton James to advise him on art, as applied to the production of posters, and other forms of artistic endeavour in which London Transport is concerned and in which design plays an important part. Dr. Herbert Read was Assistant Keeper of the Victoria & Albert Museum from 1922-31 and is the author of many books on art. Mr. Gibson has been Keeper of the National Gallery since 1939, and Mr. James has been Keeper of the Victoria & Albert Museum Library since 1925. Before the war London Transport posters enjoyed a high reputation and it is with

WANTED by a British Railway in Africa—a

Senior Locomotive Foreman to take charge under the Chief Mechanical Engineer of a small locomotive general repairs workshop. Age 35-40. Candidates must have completed an apprenticeship in the repair workshops of a Railway and have had supervisory experience in the heavy repair of locomotives. Commencing salary £540 per annum. Free unfurnished quarters, medical attention and passages. The successful candidate will be required to join the Administration Pension Scheme. Applications giving age, name, nationality, M. or S., details of technical and practical training and subsequent career to date, with copies of testimonials, should be sent to "M. V." c/o J. W. Vickers & Co. Ltd., 7-8, Great Winchester Street, London, E.C.2.

SECTIONED PERSPECTIVE VIEW OF LOCOMOTIVE FRONT END. A notable drawing of L.M.S.R. class "7P" 4-6-2 locomotive of the latest type. Reprinted from *The Railway Gazette*, June 15, 1945. Price 2s. 6d. Post free 2s. 8d.

BRITISH WORK ON PERSIAN RAILWAYS. The achievements and difficulties of the R.E.S. during the 15 months in which they laid the foundation for effective aid to Russia. Reprinted from *The Railway Gazette*, February 2 and 16, 1945. Price 1s. Post free 1s. 2d.

the object of maintaining and enhancing this reputation that an advisory committee has been appointed. London Transport posters exhibited on the Underground and throughout the area of the Board have been used widely for educational purposes in schools. They are in great demand as mural decorations and have become well-known throughout the world. "The Proud City" series, showing famous London buildings amidst bomb-damaged surroundings, was sent to many countries, and a similar demand for the "London" posters by Fred Taylor, specially produced for the recent Victory week, has been created.

L.P.T.B. Staff Re-Unions.—Five hundred employees of the London Passenger Transport Board were entertained at a re-union dinner at the Connaught Rooms, London, on July 3. The guests were representative of all sections of the staff, and included those who had been absent on war service. Lord Ashfield (Chairman) and other members of the London Passenger Transport Board, and the Rt. Hon. Alfred Barnes, Minister of Transport, had arranged to attend the dinner. Another dinner will be held on July 10, for a further 500 L.P.T.B. employees, when Mr. Barnes will be represented by Sir Reginald Hill, Deputy-Secretary, Ministry of Transport.

New L.N.E.R. Line to Filey Holiday Camp.—The L.N.E.R. is proceeding with the construction of a new branch line, a little over a mile in length, to serve Butlin's holiday camp at Filey, and every effort is being made to have the facilities in use before the end of the present camping season. The new line, which is double track throughout, forms a Y-junction with the Hull-Scarborough line about half-way between Filey and Hunmanby Stations. The new camp station will be provided with four platform lines, sidings, engine pits and water columns. At the end of the platforms, which will be 900 ft. long, a circulating area and station buildings will be erected, with a roadway and subway under the main Filey-Bridlington road, giving direct access from the circulating area to the camp. Construction of the line involves the excavation and forming into embankments of about 100,000 cu. yd. of material. Three new signal boxes, one at the camp station and one at each point of junction with the Hull-Scarborough line, will be provided.

Railway Stock Market

The tone of stock markets has been good, prices in most sections resuming an upward trend, although generally the volume of business showed little improvement. Strength of British Funds in expectation of the decision to end the "tap" issue of 2½ per cent. Savings Bonds was a feature earlier in the week. Industrial shares were helped by a number of good dividend statements; sentiment also reflected the possibility of a general rise in world prices of commodities and materials unless price control measures are resumed in the United States.

Iron and steels have been firmer, small gains predominating with Stewarts and Lloyds and Tube Investments favoured on the recent news of good contracts. Birmingham Small Arms moved higher; Vulcan Foundry were 30s., North British Locomotive changed hands up to 28s. 4½d. and Beyer Peacock strengthened to 24s. 9d. on the payment on account of preference dividend arrears.

Home Rails showed only mild response to the companies' anti-nationalisation moves, and earlier gains were not fully held. It is believed in the City that the time is ripe for rallying opinion against transport nationalisation, but that this will have to be done quickly and on as large a scale as possible. A very strong case can be made for the establishment of a Royal Commission to investigate the whole question of transport efficiency before the Government makes a final decision as to nationalisation.

The home railway market has failed to respond to the increased confidence that in the event of nationalisation the companies will make every effort to secure a fair compensation basis for stockholders. Sentiment has been affected

to some extent by the decreased traffics shown by the latest return, although the latter was not unexpected, and the forthcoming increase in fares and charges will improve matters to some extent.

The pending interim dividend decisions are attracting very little attention, partly because the belief continues that they are likely to be the same as a year ago, and partly because they are overshadowed by nationalisation and differing opinions in the market as to what would constitute fair compensation for stockholders. In this connection it is pointed out in many quarters that the railways have a just claim to "standard revenue" as defined in the Railways Act of 1921, and that on this basis, current levels of junior stocks, and also preference shares now quoted under par, would represent considerable undervaluations. In any case "standard revenue" would give the railways a strong bargaining basis as regards compensation for stockholders.

The interim dividend decisions of the Southern and L.M.S.R. are to be announced on July 25, those of the Great Western and L.N.E.R. on July 26 and that of London Transport on July 24. The view prevails that there are good prospects of dividend totals for the current year being the same as for 1945. There is a slight possibility that L.M.S.R. may decide on an interim payment on this occasion, and in some quarters it is being suggested that the Great Western may decide to pay a bigger proportion of the year's total as an interim payment than was the case a year ago.

After falling back to 56½, Great Western strengthened to 56½. The 5 per cent. preference was unchanged at 117, but the guaranteed stock eased to 125½, and the 4

per cent. debentures were 116½xd. L.M.S.R. after 27½ firmed to 27½; the 1923 preference remained at 55, but the senior preference at 78½ was a point below the level of a week ago and the guaranteed stock receded to par, although the 4 per cent. debentures remained at 107½.

L.N.E.R. second preferences, after declining to 26 at the end of last week, has improved to 26½; the first preference at 54 was a point lower on balance, while the first guaranteed further receded from 100½ to 99½ and the second guaranteed from 94 to 93½.

Southern deferred at 20 was again unchanged on balance, but the preferred ordinary, in view of the forthcoming half-yearly payment, further strengthened to 73. London Transport "C" also improved from 59½ to 60.

Argentine rails reflected a decline in buying interest, but later firmed up on renewed hopes attaching to the British Mission. Buenos Ayres Great Southern at 13 was unchanged on balance, and the 5 per cent. preference improved from 30 to 30½, although the 4 per cent. debentures at 72 were fractionally lower. Central Argentine 4 per cent. debentures were 1½ points down on balance at 66½. Buenos Ayres Western ordinary was favoured and further improved from 15½ to 15½ and the 4 per cent. debentures were 70½. Buenos Ayres and Pacific consolidated debentures were 66½ as compared with 67½ a week ago.

In other directions, Antofagasta preference was 47½xd. with the ordinary 10½. San Paulo at 54½ has been steady on the unchanged 3 per cent. dividend. Canadian Pacific rallied from 23½ to 24½. French railway sterling bonds showed fractional gains.

Traffic Table and Stock Prices of Overseas and Foreign Railways

Railways	Miles open	Week ended	Traffic for week		No. of Week	Aggregate traffics to date			Shares or Stock	Prices				
			Total this year	Inc. or dec. compared with 1944-5		Totals		Increase or decrease		Highest 1945	Lowest 1945	July 2, 1946		
						1945-6	1944-5							
South & Central America														
Antofagasta ...	834	23.6.46	27,270	—	4,220	25	787,180	770,500	+	16,680	Ord. Stk.	12	8½	11 7
Arg. N.E. ...	753	22.6.46	ps.259,400	—	ps.39,500	51	ps.1,493,600	ps.15,106,900	—	ps.113,300	"	10	5½	7 6
Bolivar ...	174	May, 1946	3,742	—	928	21	22,144	25,635	—	3,491	6 p.c. Deb.	8½	5½	6½
Brazil ...	—	—	—	—	—	—	—	—	—	—	Bonds	25	17	26½
B.A. Pacific ...	2,771	22.6.46	ps.1,898,000	—	ps. 88,000	51	ps.115,189,000	ps.111,061,000	+	ps.4,128,000	Ord. Stk.	7	5	6½
B.A.G.S. ...	5,080	22.6.46	ps.3,484,000	—	ps.533,000	51	ps.179,514,000	ps.169,555,000	+	ps.9,959,000	Ord. Stk.	13½	10½	13½
B.A. Western...	1,924	22.6.46	ps.1,382,000	—	ps.270,000	51	ps.61,428,000	ps.57,779,000	+	ps.3,649,000	"	12½	9½	16
Cent. Argentine	3,700	22.6.46	ps.3,167,000	—	ps.487,000	51	ps.160,421,796	ps.147,052,350	+	ps.13,369,446	"	9½	7	8½
Do. ...	—	—	—	—	—	—	—	—	—	—	Dd.	5	2½	3½
Cent. Uruguay ...	970	22.6.46	36,937	—	2,076	51	2,036,619	1,815,886	+	220,735	Ord. Stk.	7½	4	7½
Costa Rica ...	262	Apr., 1946	33,948	+	5,306	43	286,820	231,946	+	54,874	Stk.	16½	13	13½
Dorada ...	70	May, 1946	35,400	—	400	21	150,675	148,595	+	2,080	1 Mt. Deb.	103	102	99½
Entre Rios ...	808	22.6.46	ps.374,600	—	ps.28,600	51	ps.21,527,900	ps.20,426,600	+	ps.1,101,300	Ord. Stk.	7½	4½	6
G.W. of Brazil ...	1,030	22.6.46	23,400	—	300	25	709,600	633,800	+	75,800	Ord. Stk.	30—	23 6	22 6
Inter. Ctl. Amer.	794	May, 1946	8195,228	—	824,762	21	8970,923	8792,282	+	8178,641	"	—	—	—
La Guaira ...	22½	June, 1946	4,812	—	2,294	25	33,039	36,929	—	3,890	5 p.c. Deb.	78	70	60
Leopoldina ...	1,918	22.6.46	59,447	—	1,290	25	1,378,715	1,163,787	+	214,928	Ord. Stk.	4½	3½	3½
Mexican ...	483	31.5.46	ps.1,464,000	—	ps.459,100	21	ps.18,661,800	ps.13,441,600	+	ps.5,220,200	Ord. Stk.	½	½	1
Midland Uruguay	319	May, 1946	21,830	—	1,483	48	203,280	196,052	+	7,228	"	—	—	—
Nitrate ...	382	30.6.46	10,513	—	4,177	25	110,632	91,480	+	19,152	Ord. Sh.	75 6	67 6	77 6
N.W. of Uruguay	113	May, 1946	6,667	—	936	48	61,174	62,390	—	1,216	"	—	—	—
Paraguay Cent.	274	21.6.46	58,310	—	6,785	50	63,076,004	63,111,357	—	635,353	Pr. Li. Stk.	79½	77	73½
Peru Corp. ...	1,059	Mar., 1946	136,088	—	2,915	44	1,538,021	1,429,695	+	108,326	Pref.	10 7½	7½	15½
Salvador ...	100	Apr., 1946	138,700	—	10,300	40	1,393,700	1,308,000	+	85,700	"	—	—	—
San Paulo ...	153½	—	—	—	—	—	—	—	—	—	Ord. Stk.	60½	50½	54
Taltal ...	156	May, 1946	3,795	—	1,830	48	36,995	31,905	+	5,070	Ord. Sh.	17—	10 6	17 6
United of Havana	1,301	22.6.46	64,003	—	12,119	51	3,005,234	2,759,621	+	245,613	Ord. Stk.	3	1	1½
Uruguay Northern	73	Ma., 1946	2,039	—	193	48	19,390	18,105	+	1,285	"	—	—	—
Canada														
Canadian National ...	23,569	May, 1946	6,156,800	—	1,366,620	21	30,910,800	34,842,400	—	3,931,600	—	—	—	—
Canadian Pacific	17,037	21.6.46	1,054,000	—	216,620	24	26,382,800	29,097,200	—	2,714,500	Ord. Stk.	24	14½	24½
Various														
Barsi Light ...	202	May, 1946	21,465	—	90	9	54,465	48,562	+	5,903	Ord. Stk.	131	123	113½
Beira ...	204	Apr., 1946	75,610	—	2,752	28	508,964	536,577	—	27,613	"	—	—	—
Egyptian Delta	607	31.5.46	17,006	—	1,238	9	98,879	100,409	—	1,530	Pr. Sh.	10	8½	5½
Manila ...	—	—	—	—	—	—	—	—	—	—	B. Deb.	71	55½	71½
Mid. of W. Australia...	277	Apr., 1946	19,664	—	3,191	40	172,148	189,748	—	17,600	Inc. Deb.	97½	85	75
Nigeria ...	1,900	Apr., 1946	352,900	—	66,969	4	352,900	285,931	—	66,969	"	—	—	—
Rhodesia ...	2,445	Apr., 1946	523,706	—	52,416	28	3,517,907	3,491,415	+	26,492	"	—	—	—
South African ...	13,301	1.6.46	1,001,069	—	29,537	9	9,505,360	8,573,241	+	932,119	"	—	—	—
Victoria ...	4,774	Feb., 1946	1,234,862	—	18,137	—	—	—	—	—	"	—	—	—

† Receipts are calculated @ 1s. 6d. to the rupee